Witness Name: Ms Gillian Higgins
(MBChB, MRCS)
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UK COVID-19 INQUIRY

WITNESS STATEMENT OF MS GILLIAN HIGGINS (MBChB, MRCS)

I, Ms Gillian Higgins, will say as follows: -

1. I qualified as a doctor in 2012, holding a Bachelor of Medicine, and a Bachelor of Surgery. I was enrolled as a Member of the Royal College of Surgeons of Glasgow (MBChB, MRCS) in 2016. I am currently studying towards my Medical Doctorate ("MD") Thesis in Stem Cell Engineering.

2. Throughout the acute phases of the COVID-19 pandemic, I primarily worked in frontline healthcare settings as a Registrar in Plastic and Burns Surgery in Scotland. I worked in a Plastic Reconstructive Surgery Trauma and Burns team, was re-deployed to the Accident and Emergency ("A&E"), and additionally answered the call for volunteers in the Intensive Care Unit ("ICU") proning team, working with COVID-19 positive patients.

3. Additionally, during the pandemic, I set up the Scottish branch of the charity Med-Supply-Drive-UK (1190337). In response to shortages of appropriate Personal Protective Equipment ("PPE") and Respiratory Protective Equipment ("RPE") for healthcare workers, we sourced and re-distributed high quality PPE/RPE from other industries to the healthcare sector and promoted reusable RPE.

4. I am also a member of the Covid-19 Airborne Transmission Alliance ("CATA"), which I joined during the pandemic to support their work campaigning for recognition of the

airborne route of transmission of SARS-CoV-2 and for better respiratory and engineering protections for healthcare and social care workers.

5. In this statement, I will provide evidence on (a) my role and responsibilities during the pandemic; (b) my experience of working conditions for healthcare workers during the pandemic; (c) my experience of the issues faced by healthcare workers as a result of flawed national Infection Prevention and Control ("IPC") guidance and inadequate provision of PPE and RPE; (d) the actions I took in response to inadequate IPC measures and PPE/RPE; (e) the impact that the pandemic has had on my physical and mental health; and (f) my diagnosis and experience of Long Covid.

(a) My professional role and responsibilities during the pandemic

6. Prior to the pandemic, I held an Academic Research Fellow post in a Plastic Surgery and Burns Unit in a hospital and split my time equally between research work in the laboratory and NHS clinical work as a Registrar in Plastic Surgery.

7. At the outbreak of the pandemic in the UK in March 2020, I initially continued to split my time in this way. This was the agreed arrangement in my workplace, while there continued to be sufficient staff levels for research fellows, to reduce our risk of hospital acquired COVID-19, so that we could act as the back-up when full time clinical staff became infected. However, after just a couple of months it was necessary for me to move to full time clinical work, due to the burden on the hospital due to significantly rising numbers of patient admissions, and staff absences due to COVID-19. I continued with full time clinical work until around May 2021.

8. For around the first six months of my full-time clinical work, I worked exclusively in the Trauma team, in adult and paediatric practice. This work involved caring for patients that had suffered injuries or burns, on the wards and operating on those that needed surgery. It was intense work and there was a constant stream of patients with severe injuries to be treated. My time would regularly be split between multiple patients at once; whilst operating or running a clinic, I would often be carrying a pager in case of an emergency with another inpatient, a new referral from another hospital or new emergency patients arriving who were waiting in A&E to be assessed by me.

9. Around January of 2021, I was re-deployed to A&E to work in the Minor Injuries Unit. I was informed of this transfer during one of our regular team meetings. Due to short staffing in A&E, it had been agreed that the Minor Injuries Unit would be moved to a separate building, and be managed by staff from the Orthopaedic and Plastic Surgery teams. My work in A&E mostly consisted of assessing patients, treating them conservatively or performing minor operations. I was not given any additional training for this role, but the work did fall within my existing skill set. I continued working mostly in A&E throughout the second wave of the pandemic but continued to perform some work in the Trauma team, to do some skin cancer operating in outpatients and to cover the unit wards overnight as needed.

10. I also answered the call that went round by email, asking for volunteers on the COVID-19 ICU ward, and took up work in the Proning team in January 2021. Proning refers to the procedure of turning patients face down to assist their oxygenation whilst ventilated, and was used a lot during the pandemic to treat acutely unwell COVID-19 patients. I was not given any specific training for this role, but it predominantly involved turning patients over, which was already something I knew how to do, because of my experience in theatre.

11. I continued all this work until May 2021, when I transferred to a full-time research position.

(b) My experience of working conditions for healthcare workers during the pandemic

12. The daily reality of working in a hospital during the COVID-19 pandemic was horrifying and it took a huge emotional and physical toll on me and my colleagues.

13. My colleagues and I experienced overwhelming workloads, as COVID-19 patient numbers increased, and staffing levels decreased due to staff sickness, and extreme working hours. Prior to the pandemic I would have worked 12 hours shifts, 7 days in a row, around once every 4 months. During the pandemic, I was typically working 12 hour shifts, four days in a row, followed by one day off, on repeat, sometimes switching from nights onto days or vice versa. Elective work prior to the pandemic

was typically 8am to 5pm, with a 24 hour on-call shift (i.e. a day shift from 8am to 5pm, followed by an on call overnight shift until 8am) every 10 days or so; however, during the pandemic, the majority of shifts were 12 hours long. I was also volunteering on the COVID-ICU in addition to my rota commitments, going up to the ICU wards before and after shifts.

14. Our staffing resources were extremely limited. For example, we would usually have had the assistance of junior staff to care for the ward patients whilst we operate, but they had all been re-deployed to COVID wards. Registrars from our team were assigned to cover ward day and night shifts. Similarly, when I worked on the ICU wards there was only one nurse per two patients, when one to one care should have been provided.

15. Many of my colleagues were abruptly thrown into working in ICU. At the beginning of the pandemic all planned "elective" surgery was cancelled and our recovery area in Plastics theatres was soon turned into an additional ICU, as the existing ICU was already full. The nurses from my team in Plastic Surgery, staffed this newly formed ICU. Our nursing teams are highly skilled in recovering patients from surgery and had a wealth of experience caring for patients that were relatively well, likely to survive surgeries and who usually made good recoveries. However, they found themselves caring for acutely unwell COVID patients. Our nursing team were terrified, and it was commonplace for people to be in tears when staff ward allocations were decided upon at morning meetings. Working on the COVID wards put a huge psychological strain on us all; the stress of working with patients that were so acutely unwell, and with such high death rates. The building was running at capacity, and there were weeks when the clinical directors were concerned that we could not pipe enough oxygen into the hospital to care for all the patients, such was the demand for ventilators and oxygen therapy.

16. Many of us were exposed to death on a daily basis. When I was working in ICU, I saw huge numbers of patients dying. It was usual to arrive for a proning shift, only to become aware that none of the patients from my previous shift were still there; and for it to transpire that none of them had survived. I did not see any patients recover and be discharged from COVID-19 ICU during my shifts working there. It had

become common place to see body bags containing people that had died being moved around the hospital, to the mortuary.

17. My colleagues also experienced seeing and having to treat our own team-mates on ICU and High Dependency Units ("HDU"), many of whom sadly died, including two members of my team. The two members of my team that passed away were Porters, whose role during the pandemic was to transport patients up and down from A&E to ICU in the lifts. They had an intense exposure to COVID positive patients, in cramped and poorly ventilated spaces. As I will discuss in more detail below, as a result of national IPC guidance, they were not granted RPE.

18. My colleagues and I were incredibly scared of contracting COVID-19 infection at work, and taking the virus home and infecting our loved ones. This fear was particularly potent in the context of the extreme ill-health and death we were witnessing every day. I am aware of colleagues that stayed in hotels for extended periods of time in an attempt to protect their families. I separated from my boyfriend of 3 years duration who I lived with at the time, with the main contributing factor being my fear of giving him COVID. Even when restrictions began to be lifted in the summer of 2020, it still didn't feel safe to see my friends and family for fear of COVID killing them. This meant that I had to go through a lot of extreme stress during the pandemic alone, without my support network.

(c) My experience of IPC measures, including PPE and RPE provision, for healthcare workers during the pandemic

19. It is my view that some of the most desperate conditions for social and healthcare workers over the pandemic, was a direct result of the inadequate national IPC guidance for healthcare settings, and the failure to provide social and healthcare workers with safe ventilation and adequate RPE.

20. In March 2020 the UK's national IPC guidance downgraded the requirement for healthcare workers to be provided with RPE, such as FFP3 masks, which are necessary to protect the wearer from airborne hazards, to only some medical procedures known as "Aerosol-Generating Procedures" ("AGPs"). For all other

medical care national IPC guidance only recommended the use of lower-level protection, such as Fluid Resistant Surgical Masks ("FRSMs"), gloves and aprons. The rationale for this guidance was inaccurately based on droplets being the primary transmission route of the SARS-CoV-2. It did not take into consideration the significant airborne route of transmission and failed to apply the precautionary principle, in spite of the strength of the data for airborne transmission. The Health and Safety Executive ("HSE") do not class FRSMs as PPE and it was glaringly obvious as the recipient, that they were not fit for purpose.

21. I do not intend to go into detail in this statement about the scientific evidence base for the airborne route of transmission of SARS-CoV-2. I instead refer the Inquiry to the detailed submissions on this subject given in the Module 3 Rule 9 statement of CATA, of which I am a member and contributor. I will however provide my personal account of how strict adherence to flawed IPC guidance impacted those working in the healthcare sector and put us at significant risk.

22. My workplace adhered strictly to national IPC guidance. As such, all healthcare workers were advised to wear an FRSM, and were advised only to wear RPE when performing procedures that fell within the UK's AGP list. In my own work, this meant the only circumstances in which I was advised by my employers to wear RPE during the pandemic was when I was working in ICU, or performing an AGP on the list in another setting.

23. As part of its IPC measures, the hospital I worked in also implemented "red" zones, for patients that had tested positive for COVID-19, and "green" zones, for patients that were either COVID negative, or whose COVID status was unknown but didn't present with COVID symptoms. The "red" zones, often comprised of multiple rooms of shared bed bays of 6 patients or more, with a nursing station in the middle of the ward. Despite being surrounded by coughing COVID positive patients, if there was no AGP being performed, staff had only an FRSM and a plastic apron for protection. Moreover, whilst the "red zones" and "green zones" had been separated bureaucratically, these were not air-tight; and by sharing the same air there was nothing preventing airborne COVID-19 transmission between them.

24. There was a serious sense of unease among many healthcare workers about the level of protection that was being provided to us. Notably for me, while performing my research role, in my university research laboratory's risk assessment, if sharing a room with another individual was necessary (spaced as per government guidance), FFP3 RPE was advised. Whereas, in the hospital setting, an FRSM was all that was recommended by IPC guidance and as a consequence, that was all that was provided by the NHS when treating COVID positive patients, even in a ward full of coughing COVID positive patients.

25. Additionally, at the start of the pandemic, I dedicated my lab time to researching effective ways to stop the spread of COVID-19 in healthcare settings. As such, I built a strong knowledge base about the IPC measures that were necessary to protect healthcare workers from COVID-19, and the need for properly fitted RPE. I had contacted RPE experts, Occupational Medicine specialists, and ventilation experts who advised me of the evidence for the use of RPE and High Efficiency Particulate Air ("HEPA") ventilation in clinical settings to protect from SARS-CoV-2 transmission. I found additional data published in the literature to support this, from the experience of the COVID-19 pandemic in China and Italy. I had met with RPE manufacturers to discuss RPE designed specifically for the healthcare setting; they were keen to help the NHS. I sourced cleaning protocols for reusable RPE that were published in Edinburgh and were, at that moment, being used in clinical settings by NHS teams in London. I networked with Health and Safety and Infection Control personnel that were using reusable RPE with success in multiple other UK NHS Trusts and put them in touch with my own Health and Safety, Occupational health and Infection control team. I compiled evidence that reusable RPE was safer, had greater equity, was more cost effective and ecologically sound. It was therefore incredibly distressing to witness my friends and colleagues redeployed to COVID wards wearing only FRSM, and that every attempt I made to protect them was ignored.

26. The national IPC guidance being implemented in my workplace was also in direct contradiction to the independent advice being provided by my professional body, the British Association of Plastic Reconstructive and Aesthetic Surgeons ("BAPRAS") and by the British Association of Oral and Maxillofacial Surgeons ("BAOMS"), who were recommending use of FFP3 masks for many of the surgical procedures I was

undertaking. All surgical professional bodies provided independent guidance; over and above that of national IPC guidance, in an attempt to protect their members. For an example, please see 'Personal Protective Equipment (PPE) for Surgeons during COVID-19 Pandemic: A Systematic Review of Availability, Usage, and Rationing' by Whitaker et al, in the British Journal for Surgery **GH/1 [INQ000300613]**

27. I appreciate that those implementing IPC measures in my workplace were simply following flawed national guidance and were working within an existing toxic culture of bullying and intimidation within the NHS. The following examples are therefore the result of these systemic failures, rather than being solely attributable to any specific individual.

28. Due to the rigid adherence to national IPC guidance in my workplace, I was challenged at work on multiple occasions for wearing RPE in settings not recommended by government guidance. On one occasion I was performing urgent surgery inside the mouth of a child who had been attacked by a dog. As part of that operation copious lavage was required, it would be a lengthy procedure and the child had not had a COVID test. As such, in order to protect myself in line with BAPRAS and BAOMS guidance, I wore an FFP3 mask and advised the nursing staff to do the same. However, I was challenged for wearing an FFP3 mask by a colleague, who escalated the issue to a manager, who interrupted the procedure to tell me I was not allowed to wear it. I did not remove my mask.

29. On another occasion, I was challenged by a colleague for wearing an FRSM in an area that had been marked as a "no PPE" staff zone. This area was a cramped computer hub allocated for staff paperwork, but it shared an airspace with a ward with patients on it. Given the risks of airborne transmission in all settings, I felt it was necessary to wear an FRSM at a minimum, to try to protect my colleagues and nearby patients on the ward. Nevertheless, the challenge was raised all the way to Consultant level and I was asked to remove the mask. I refused.

30. Even when RPE was supposed to be provided in accordance with the national guidance, there were significant shortages. This was very stressful as you never knew if you would have access to the RPE you needed, or the type of mask that would fit you. There were multiple occasions where we were informed the hospital

only had enough PPE for another couple of days, and were waiting on an urgent shipment, which was a precarious position to be in.

31. We were also provided with disposable FFP3 masks for which the manufacturer's expiry date had passed. The expiry dates on the boxes for these masks had stickers with a later expiry date stuck over the top – sometimes there were multiple stickers layered, with the date being extended on each one.

32. In order to be able to wear RPE in accordance with BPRAS for the procedures I was performing I re-used FFP3 masks. Through my own research and professional contacts, I became aware that SARS-CoV-2 survives on surfaces for 72 hours. Due to shortages in the mask that would fit me, I would store FFP3 masks in a zip lock bag for 72 hours before reusing them on rotation. Had there been sufficient supplies of suitable and appropriate RPE I would not have had to do this.

33. Additionally, there were significant issues with provision of RPE that would fit. FIT testing is the process of ensuring RPE has an airtight seal, which is essential to ensuring its effectiveness in protecting against airborne hazards. There were limited resources available for FIT-testing in my workplace, and it was often performed slowly and inefficiently. I spent hours in FIT test queues. One of the methods used for FIT-testing included making a hole in the mask by putting a tube through, to measure the air pressure and determine if there was an air leak. This resulted in countless masks being wasted during the FIT-testing process and we would often run out of the brand we had just been FIT tested for, as they had all been used up in the FIT-testing process. In addition, brands of RPE would often be changed based on what the hospital could get their hands on, and it would be necessary to redo the FIT-testing process.

34. I also witnessed serious inequality in respect of FIT-testing, as there was often a lack of RPE that could be properly fitted to the faces of the diverse NHS workforce. On discussion with the RPE manufacturers, it transpires that the anthropomorphic data used for designing the masks is based on the White male face. As such, FIT-testing of disposable FFP3 masks often failed for people of non-white ethnicities, women, people with smaller faces, and people with facial hair for religious reasons. This put

individuals who couldn't achieve a proper FIT-test at increased risk as they did not have access to any adequate RPE.

35. The research work I had done indicated that Power Air-Purifying Respirators ("PAPR") would be the highest protection from airborne hazards, they would also fit everyone. However, they are heavy for a long day of looking after patients, and they are around £300 each; prohibitively expensive for the NHS to provide for everyone in the workforce. Reusable respirators on the other hand would fit the majority (~90% of the NHS workforce population), the masks (~£20) last for 10 years according to the manufacturer and filter cartridges (~£5) would last a pandemic cycle. There were also multiple options for cleaning the respirators safely, that had already been used by thousands of NHS workers in NHS England Trusts; some of these protocols were developed in Scotland.

36. In this knowledge, the frustration of seeing precious and expensive disposable FFP3 masks being put in the bin repeatedly, people being left unprotected, the unnecessary stress, scrambling for procurement, and the inefficiency, injustice and inequity of it all was overwhelming.

37. In addition, lack of appropriate and suitable RPE had an impact on individuals' careers. For example, multiple of my female surgical colleagues were senior registrars and were not provided with RPE that fit. As much of our workload included high risk procedures, where BPRAS advised the use of RPE; without it they could not perform all the work necessary to obtain their Certificate of Completion of Training ("CCT"). This put them at a training disadvantage and resulted in lost fellowships in some cases; fellowships which they relied upon to obtain consultant posts. In addition, there were vital clinicians in the workforce, at the top of their fields, such as a clinical director of our ICU, who could not set foot in their department for the first year of the pandemic, because they were not provided with RPE that would fit them. This consultant had bought her own PAPR, which is beyond the RPE provided by the NHS; however, she was told that she must not use this as it was not NHS approved kit, and the Health and Safety team confiscated it from her.

38. Issues of inadequate and inequitable PPE therefore also contributed to the NHS having insufficient staffing levels and limited access to the full range of the NHS

workforce's expertise, whilst posing massive disadvantages physically, psychologically and in some cases, it also widened gender and racial, seniority and financial gaps.

39. More broadly, there was also much confusion in my workplace arising from the frequent and chaotic changes to national IPC guidance. Whilst there was a daily briefing sent round, it was often unclear what guidance should be followed, particularly when the guidance being circulated seemed illogical or at odds with guidance that healthcare workers were being provided by their professional bodies.

(d) My response to inadequate IPC guidance and PPE/RPE provision

(i) Med-Supply-Drive-UK (1190337)

40. As mentioned at the start of this statement, in response to the inadequate provision of PPE and RPE for healthcare workers, I became involved with the charity Med-Supply-Drive-UK.

41. Med-Supply-Drive-UK was set up in March 2020 by a group of volunteer NHS doctors, medical students and other individuals who were concerned about the safety of healthcare workers due to the shortages of appropriate and effective PPE and RPE for social and healthcare workers. The charity sought to source and re-distribute high quality PPE/RPE from other industries to the social and healthcare sectors and also promoted use of reusable RPE. At the start of the pandemic, I heard about a group in the Scottish Highlands comprised of an Occupational Medic and an RPE expert, who had successfully provided all public facing workers in their community, including social and healthcare staff, with high quality reusable RPE, by reallocating kit from furloughed fish farms and wood mills. I approached them, and the Med-Supply-Drive-UK team in London to suggest we unite forces, and setup the Scottish branch of the charity.

42. The UK has a wealth of manufacturing industries who use high quality reusable RPE routinely. In order to address the global shortages of RPE and PPE, the charity worked by reaching out these industries, asking for RPE/PPE that was not being

used during furlough, and co-ordinating the re-distribution of donations to social and healthcare settings that had shortages.

43. The charity was run by volunteers. Some of these volunteers were friends and family. Others were members of the public. For example, at the start of the pandemic, we put out a call on social media, and had around 400 volunteers sign up over a weekend. Most of the volunteers spent time calling up industry contacts to determine if they had spare PPE or RPE and responding to calls from healthcare services that were in desperate need of resources.

44. We also had several teams hand making and delivering scrubs, out of recycled bed linen and curtains, and delivering them to healthcare centres. 1,000 pairs were delivered from our Med-Supply-Drive Scotland "Scrub Hub" to my hospital alone. This was featured as a double spread "good news story" in the Scotsman newspaper, and on the 6 o'clock STV News; but in reality, we all needed scrubs for infection control purposes, and we were not provided with them by the NHS.

45. We then had volunteers that were able to transport the PPE/RPE to those that needed it. In Scotland we mostly asked for any unused resources to be taken the nearest local healthcare centre. A taxi company in the central belt made deliveries to the Highlands and Islands. The Med-Supply-Drive-UK team in England also had a central warehouse to sort and store the PPE/RPE supplies, so that resources could be re-distributed more widely. Across the Med-Supply-Drive-UK teams, we were able to re-distribute more than ~500,000 items of high quality PPE/RPE to social and healthcare workers during the acute phase of the pandemic.

46. In addition to this wider work with Med-Supply-Drive-UK, I also lobbied for greater access to RPE within my own workplace on a daily basis, through regular phone calls and emails to the Health and Safety, Occupational Health team, PPE leads, IPC team, Infectious Diseases leads, clinical directors and managers; notifying them of new evidence of the risks of airborne transmission, providing advice of how to best protect our staff by using Med-Supply-Drive's expert and industry contacts.

47. Early on in the pandemic, in April 2020, the Health and Safety, Occupational Health and Management teams in my workplace seemed keen to make use of Med-Supply-Drive-UK's resources, and informed me that they had a list of healthcare workers in key roles in the hospital for whom they had been unable to source RPE that would fit. Med-Supply-Drive Scotland sourced reusable respirators and we arranged for an RPE expert to fit them. We successfully fitted 20 healthcare workers with high spec reusable respirators that passed all official NHS FIT-tests. We also provided an evidence based cleaning protocol, and safety documentation demonstrating that these masks were even more protective than the disposable FFP3 routinely provided by the NHS.

48. However, following this, the Health and Safety team reversed their position and confiscated all the masks that had been provided. I was not ever given a full explanation as to the reason the masks were confiscated but was told that there were health and safety concerns about cleaning the reuseable respirators and the length of time that the filters in the respirators could be used for. I provided answers, putting the team in touch with Health and Safety leads in other NHS hospitals that had been using these respirators for months. I also provided details for several RPE manufacturers who were keen to help and put them in contact with National Services Scotland and with Virologists who had developed cleaning protocols for reusable respirators – but still the masks provided were not returned to my colleagues.

49. One of the individuals who Med-Supply-Drive Scotland had provided with a FIT-tested reuseable respirator initially refused to return their mask. However, my colleague was told by a manager that if they went against the guidance by wearing the mask and subsequently died from COVID-19, their family would be denied death in service benefit. My colleague therefore returned the re-useable respirator.

50. I also became aware through my regular communications with the head of Health and Safety at my workplace that they had purchased an additional ~160 reusable respirators – but, to my distress, these were not put into use during the pandemic.

51. Despite the initial interest, my ongoing efforts within my workplace to promote the RPE solutions Med-Supply-Drive-UK could offer were rejected by Health and Safety, Occupational Health and management teams. My understanding is that this was

primarily due to their concern that reusable RPE differed from the recommendations in national IPC guidance, and that they would face serious repercussions for deviating from this guidance.

52. Many other NHS Trusts in the UK were using FIT-tested reusable respirators to protect their staff from the start of the COVID pandemic, having used them successfully during influenza outbreaks previously, or following example from other nations globally. This showed that it was possible for these solutions to be used effectively in the NHS, and so made the resistance to our efforts in Scotland all the more devastating. It also meant that there was a postcode lottery for the level of protection that healthcare workers in the UK were being provided.

(ii) Lobbying at government level

53. I also campaigned at a government level in Scotland for access to RPE for social and healthcare workers and promoted the solutions offered by Med-Supply-Drive Scotland. I have provided some examples of this campaign work below.

54. On 21 April 2020, some colleagues and I had a meeting with the Scottish Chief Medical Officer ("CMO"), Dr Gregor Smith. At this multidisciplinary meeting, we provided the following evidence:

- We voiced a lack of confidence in the IPC guidance and advice, and we requested FFP3 masks and surgical gowns as minimum PPE when treating COVID-19 positive, suspected or untested patients, to protect workers throughout social and healthcare settings in Scotland.
- We began the meeting with personal accounts from a multidisciplinary team of healthcare workers, discussing the terror they were experiencing at work and their specific concerns about the national IPC guidance and advice.
- We discussed statistics that higher death rates for COVID-19 were being recorded in Black and Indigenous people and People of Colour (BIPOC) and we asked for greater protective measures to be put in place urgently.
- Personal experiences of the professionals present were shared; including accounts of PPE shortages in GP practices, care homes and pharmacies, necessitating workers buy their own PPE before coming to work.

- We provided the CMO with evidence on the airborne route of transmission of COVID-19, and evidence that adequate respiratory protection and ventilation controls can prevent infection and nosocomial spread.
- We also shared a presentation by Dr Wei Chen in Shanghai on effective measures that had been taken to protect medical staff in Wuhan **GH/2 [INQ000300398]**
- The fact that coughing produced aerosols was illustrated, and it was voiced that RPE being granted as per guidance, for a limited number of AGPs on an arbitrary list only, was illogical and unscientific.
- An anecdote of an Ear Nose and Throat (ENT) surgeon being denied FFP3 protection when performing tracheostomies and head and neck procedures, because they are not on the AGP list, was reported.
- Evidence from the literature of asymptomatic transmission risk was provided.
- Concerns were raised around the lack of RPE whilst treating patients at close contact, in poorly ventilated areas, such as during nursing home visits; with one GP sharing that two of the district nurses in his team were critically ill and hospitalised with COVID-19 at the time of our meeting.
- Concerns were voiced that social and healthcare workers and the settings we work in were at high risk of becoming vectors of disease spread, without provision of effective infection control measures; thereby becoming a danger to our patients, families, communities and of course posing personal health risks for workers.
- Long Covid and the risk of chronic debilitating disease as a repercussion of poor IPC controls was highlighted.
- Workplace legislation and the responsibility and duty of care of the Government and NHS has to workers was discussed; as was the proper use of the precautionary principle in protecting workers in the workplace.
- I pointed out that nosocomial infections deaths of workers in the social and healthcare sector were unacceptable and avoidable, and I brought evidence-based solutions to the table.
- I concluded the meeting by presenting the evidence in favour of using re-useable respirators, including their superior safety, availability and sustainability, their benefits from an equality perspective, and their cost effectiveness. I suggested a short term solution in mobilising this abundant resource from industry, and

investing in a respirator programme for health and social care workers in the long term.

- I offered the details of several RPE manufacturers who were able and willing to provide re-useable respirators at that time (one manufacturer who was supplying NHS Birmingham stated they could provide NHS Scotland with 5,000 reusable respirators per week with their current machinery, and that they would expand if they had a sufficient order). I offered details of local major manufacturers we had networked with who offered their materials and laser cutters to make gowns and scrubs, and Universities who wanted to contribute their Engineering Professorial expertise, injection moulders and 3d printers to make visors.

55. I felt the CMO was dismissive of the strong evidence we had to offer. I recall that, directly after our colleague with twenty years of Occupational Medicine expertise discussed the significant airborne transmission risk of SARS-CoV-2, in response CMO Dr Smith simply stated that COVID-19 is spread by contact and by droplets, and listed the committees who think so. There was a complete lack of acknowledgement of the evidence we presented, our collective expertise and lived experience of airborne transmission of this disease.

56. Further, I recall that the CMO, Dr Smith, recognised that healthcare workers were going "above and beyond" in terms of care and commitment to patients and were taking personal risks on a daily basis; and that at this juncture, a member of our team pointed out that the risk from caring for COVID-19 patients is documented in the literature as a 0% infection rate for healthcare workers from centres where adequate RPE and ventilation controls are in place **GH/2 [INQ000300398]**

57. I also specifically recall that the CMO stated that while protecting staff was important, the Government did not wish to "overreact" by implementing measures of a higher standard than we needed and that couldn't be sustained. My colleague contributed that he did not agree that protecting the workforce, in particular vulnerable members of our community with higher risk of death from COVID-19, with evidence based solutions was an "overreaction". I also reiterated that high quality RPE is readily available, would be more cost effective, and would lead to less nosocomial infection, staff illness and death.

58. I have never been sent formal minutes of this meeting with the CMO, but hope that the Inquiry may be able to obtain these from the Scottish government.

59. On 3 June 2020 the same and additional contemporary information was provided at a meeting I attended as part of CATA with the Department of Health and Social Care ("DHSC") and the IPC Cell – full details of which are provided in CATA's Module 3 Rule 9 statement.

60. The fact that the UK has one of the highest healthcare worker death rates from COVID-19 in the world, and some of the least stringent protective policies in place, was highlighted at this forum.

61. On 25 June 2021, I had a meeting with the Scottish First Minister, Nicola Sturgeon, and again my colleagues and I provided evidence of airborne transmission of SARS-CoV-2 and the evidence to support use of HEPA ventilation and reuseable respirators to protect social and healthcare workers. My colleagues and I provided the First Minister with a list of academic references to support our assertions **GH/3 [INQ000300400]** and provided prototypes of reusable respirators designed for care settings, and the details of a factory in Scotland that would be able to mass produce them. My minutes of what was discussed at this meeting can be seen in my follow up email to the First Minister **GH/4 [INQ000300399]**

62. The only perceived consequence of a second meeting with the First Minister on 25 February 2022; was obtaining another meeting with CMO Dr Gregor Smith. This felt like a fruitless full circle moment, a circle that had taken two years. At our meeting on 13 April 2022, CMO Dr Smith was accompanied by multiple Civil Servants and the Chief Nursing Officer ("CNO"), Alex McMahon. Myself and my colleagues once again presented relevant data and the growing body of evidence in respect of airborne transmission and a "how to" for implementation for reuseable RPE and ventilation. It was suggested in that meeting by CMO Dr Gregor Smith that I may have financial incentives. My colleague and I assured him that is not and never has been the case; I have no conflicts of interest. I have provided my written notes of that meeting **GH/5 [INQ000300401]** and subsequent rebuttals from the CNO, Nurse McMahon [see Exhibits **GH/5-GH/8 [INQ000300664; INQ000480638; INQ000480639]**

63. Ultimately, despite our best efforts, the evidence and solutions we proposed were not taken on board by the Scottish Government. Despite engagement of this kind from the very early stages of the pandemic, it has still not been formally acknowledged in Scotland that COVID-19 is primarily an airborne disease and RPE is still not recommended in national guidance for healthcare workers outside of COVID ICU wards.

64. It is deplorable that the concerns we raised as early as a month after UK lockdown, at our meeting with the CMO in April 2020, are still not being addressed, despite our providing evidence, practical solutions and the necessary expertise to implement them so early in the course of the pandemic. I am aware of clinicians with chronic illnesses, who are *currently* caring for COVID-19 positive patients and have requested RPE to protect themselves, whom the NHS have given an FRSM, as the RPE they offer doesn't fit. We are no further forward.

65. It is difficult not to feel that so much suffering and unnecessary loss of life could have been avoided, had we been listened to in April 2020. My hope is that this Inquiry will allow lessons to be learned, and the necessary engineering and RPE controls to be urgently put into place to protect workers.

(e) The impact of the pandemic on me

66. My intense workload, the horrors I was seeing at work, and the fear I was experiencing regarding my colleagues' safety, and my own safety, had a huge impact on me. My work and experiences during the pandemic have had a significant and lasting impact on my physical and psychological health.

67. I experienced severe stress, anxiety and depression during the pandemic. I started experiencing night terrors where I would wake up, and find myself standing in my hallway screaming. I often wouldn't sleep or eat at all for multiple days in a row, and I lost around 1.5 stone of weight. I experienced severe gastric reflux as a result of stress, which has subsided entirely since the pandemic. I ground my teeth so much during the pandemic that I lost 1mm from each tooth, and I have been advised by my

dentist that in the future I may need "total dental reconstruction", likely by the time I'm 40, as a result.

68. At my lowest point, in September 2020, I had severe and persistent suicidal ideation with planning, and as a result was referred for an urgent appointment with a psychiatrist and prescribed anti-depressants. I sought therapy privately due to the extremely long waiting list for a psychologist appointment. It was necessary for me to take the whole month off work in November 2020 to recover from this mental health crisis. I am aware of several other colleagues needing to take time off work for similar reasons. When I was in a crowd of people for the first time since the pandemic started, around Summer of 2021; I had a panic attack with flashbacks of people dying of COVID-19 and patients on ventilators. I have since been treated for PTSD.

69. At no point was I offered psychological or occupational health support from my employer. When I handed in my notice there was no exit meeting and no questions asked; I had trained and worked in that NHS Board for 14 years.

70. In my mind, the severity of toll the pandemic took on me was undoubtedly due to the gaslighting and resistance I felt in response to my attempts to protect people from airborne COVID-19 transmission. I became well educated in the risks from the beginning of the pandemic; I experienced intense feelings of cognitive dissonance between what the national guidance was saying would protect me and my colleagues, and what I knew to be true. The guidance seemed laughable and the situation dystopian. It felt like we were being treated as disposable "cannon fodder" and that military rhetoric like "frontline worker" was being used to normalise preventable healthcare worker deaths. I think the worst bit for me was watching my friends and colleagues go into these incredibly dangerous situations in "red zones" each day, and watching so many of them fall severely ill, and feeling helpless to do anything. I was working every waking moment of every day and desperately trying to find something that might help protect people. No matter what I did it didn't change anything on the ground. I felt helpless. It was galling. A truly desperate situation.

(f) My diagnosis and experience of Long Covid

71. I have also been diagnosed with Long Covid, which has had a significant impact on my life.

(i) My Long Covid Symptoms

72. Before my Long Covid diagnosis I had never been fitter; having just ran my first half marathon and been hiking in the Atlas Mountains. I first began experiencing symptoms of Long Covid in June 2022, following a confirmed COVID-19 infection in the February 2022. My initial symptoms included, extreme exhaustion, forcing me to nap several times a day, and severe brain fog with word finding and concentration difficulties. The short term memory loss was severe, and felt to me like I was developing dementia. It causes me to regularly miss appointments or forget to pay bills, and on one occasion I left the gas burner hob on in my home and left the house for the rest of the day. This was during a time when I had forgotten to renew my home and contents insurance. By September 2022, I needed a nap every four hours, and if I tried to stay awake, I would feel physically sick and have terrible headaches.

73. My symptoms are ongoing and significantly limit my ability to do everyday activities. It has made my world very small. I am regularly severely fatigued and I need at least one nap every day. On some days I don't have enough energy to get out of bed, eat or wash. I sometimes experience extreme breathlessness coming up the short staircase to my flat and my tolerance for exercise is hugely reduced. I can't cycle, hike or run, and on my worst days I can't even make it to the end of the street and back.

74. My symptoms have unsurprisingly had a significant impact on my ability to work. I had to postpone my MD Thesis studies by a year. I have now returned to research work, but I don't work mornings due to brain-fog, and have to call in sick around one week per month because my fatigue is so debilitating. I have not been into the lab for over 6 weeks at the time of writing this statement due to a flare in symptoms. It is therefore possible that I will run out of time and fail my MD degree.

75. I still do some clinical work, which I used to do on a weekly basis, but am now only able to do twice a month. Before my Long Covid Symptoms started I relied on ad-hoc 24 hours shifts for an income whilst studying, but I am no longer able to do night

shifts, or long shifts. This has seriously impacted my income and has caused me significant financial hardship.

76. The limits Long Covid has put on my life has impacted my sense of identity. I am still coming to terms with the fact that I have a disability and grieving the fact that I might not get any better. In addition to not being able to do things that I previously enjoyed, I have lost friends due to the change in my lifestyle, I have less independence as I can't drive when my symptoms are severe, and I have become much more socially isolated due to my symptoms.

(ii) My Long Covid diagnosis and access to treatment

77. I first went to my GP about my symptoms in June 2022. Luckily, my GP was extremely supportive and helpful. I was therefore able to obtain an official diagnosis of Long Covid in September 2022 without too much difficulty. After extensive and sometimes invasive testing, every other condition I was tested for came back negative. I had severe B12 deficiency and anaemia, which are associated with Long Covid and am on painful B12 intramuscular injections, 3 monthly, which I self-administer due to challenges in obtaining appointments at my GP practice.

78. Following this diagnosis, it has taken until April 2024 to get an appointment at my local Long Covid Clinic, as the waiting list is so long. I also understand that these services are only able to provide supportive care, such as acupuncture, to help ease symptoms, and welfare services, such as support groups and benefits advice, but there is currently no treatment for curing Long Covid.

79. I am paying a large sum of money to visit a Long Covid Specialist Doctor Privately, the appointment is an hours journey away, and the soonest I can get an appointment is October 2024.

80. I have been granted a discretionary hardship fund from my university and am also currently being assessed for Disability Living Allowance, due to the severity of my symptoms.

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: 3/7/24