

Witness Name: Narain Moorjani

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Exhibits: 15

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UK COVID-19 INQUIRY

WITNESS STATEMENT OF SOCIETY FOR CARDIOTHORACIC SURGERY IN GREAT BRITAIN & IRELAND (SCTS)

I, Narain Moorjani, President of the Society for Cardiothoracic Surgery in Great Britain & Ireland, 38-43 Lincoln's Inn Fields, London WC2A 3PE, will say as follows: -

1. I make this statement about the SCTS's views on the impact of the way the healthcare systems functioned in the United Kingdom during the Covid-19 pandemic for those providing and receiving care for ischaemic heart disease, in response to the UK Covid-19 Public Inquiry's Request for Evidence under Rule 9 of the Inquiry Rules 2006, dated 4 January 2024, in relation to Module 3 of the Inquiry.
2. I am the President of the Society for Cardiothoracic Surgery in Great Britain & Ireland (SCTS). I was appointed to the role in October 2022. Prior to that I was SCTS President Elect (April to September 2022) and SCTS Honorary Secretary (March 2018 to March 2022).
3. I make this statement on behalf of the SCTS and confirm that I am duly authorised to do so. This statement has been prepared following collation and review of SCTS documents relevant to the pandemic and discussion with colleagues.
4. I am a Consultant Cardiac Surgeon at Royal Papworth Hospital, Cambridge, having been in post since July 2011. I am Clinical Lead for Cardiac Surgery at Royal Papworth Hospital. I was appointed to this role in Sept 2016.

The role, functions and aims of the Society for Cardiothoracic Surgery in Great Britain and Ireland ("SCTS")

5. The Society for Cardiothoracic Surgery in Great Britain & Ireland (SCTS) is a professional society aiming to promote excellence in heart and lung surgery for the benefit of the public and public education. It is an independent, self-funded charitable organisation that is the principal representative body for cardiothoracic surgery in Great Britain & Ireland.

6. The SCTS has over 1800 members, inclusive of all healthcare professionals involved in and interested in cardiothoracic surgery, including consultant cardiothoracic surgeons, surgical trainees, trust-appointed doctors, nurses and allied health professionals. The Society is patient-focussed with a lay/patient representative on its executive committee. It has a responsibility to patients undergoing cardiothoracic surgery, as well as all professionals involved in the care of these patients.

7. The aims of the SCTS are:
 - a. to advance science in the field of cardiothoracic surgery for the benefit of the public by:
 - i. encouraging and promoting excellence in the practice of cardiothoracic surgery;
 - ii. encouraging innovation in and scientific understanding of cardiothoracic surgery;
 - iii. promoting, undertaking, encouraging, and assisting in research in cardiothoracic surgery;
 - iv. advancing the education of the public in cardiothoracic surgery.
 - b. to further any other charitable purposes relating to the practice of cardiothoracic surgery.

8. In response to the COVID-19 pandemic, the SCTS co-operated and worked closely with several organisations either directly or indirectly involved in the care of patients undergoing cardiothoracic surgery both nationally and internationally. It was through this collaboration and close working that the care of patients undergoing cardiothoracic surgery could be optimised through a process of shared learning and developing clinical pathways in the face of a challenging clinical environment and a rapidly evolving global pandemic. These organisations included the:
 - a. Federation of Surgical Specialty Associations (FSSA)
 - b. Royal Colleges of Surgeons (RCS) of England, Edinburgh, Glasgow and Ireland
 - c. Department of Health and Social Care (DHSC)

- d. British Cardiovascular Society (BCS)
 - e. British Cardiovascular Intervention Society (BCIS)
 - f. Society of Clinical Perfusion Scientists (SCPS)
 - g. Association for Cardiothoracic Anaesthesia & Critical Care (ACTACC)
 - h. British Thoracic Society (BTS)
 - i. British Thoracic Oncology Group (BTOG)
 - j. National Health Service Blood and Transplant (NHSBT)
 - k. European Association for Cardio-Thoracic Surgery (EACTS)
 - l. Society of Thoracic Surgeons (STS)
 - m. American Association for Thoracic Surgery (AATS)
9. In a situation of a constantly evolving disease process, with a paucity of data regarding epidemiology, transmission, and treatment of patients with COVID-19, the SCTS communicated regularly with all cardiothoracic surgical practitioners (including consultants, trainee doctors, nurses and allied health professionals) via email, social media, and the SCTS website. As well as disseminating information from publications from around the world, the SCTS produced its own guidance based on expert opinion and collaborated with other organisations (see above) to write joint guidance to support all healthcare practitioners caring for patients with ischaemic heart disease (IHD) undergoing coronary artery bypass graftsurgery (CABG).
10. At the start of the COVID pandemic, the SCTS collaborated with the Society of Clinical Perfusion Scientists (SCPS) and the Association for Cardiothoracic Anaesthesia & Critical Care (ACTACC) to produce '*Joint guidance to UK cardiothoracic surgical teams for procedures on patients with COVID-19 [NM/01 - INQ000467745]*'. This guidance documented general principles to be adapted for local use, including establishing a multi-disciplinary approach around decisions on when to operate; developing alternative and augmented pathways; an enhanced consent process to communicate risks and benefits to patients effectively; processes to ensure staff safety, including the appropriate use of PPE; and screening pathways. This document was sent to all SCTS, SCPS, and ACTACC members.
11. The SCTS also developed and circulated the *COVID-19 Cardiothoracic Surgery Escalation Framework [NM/02 - INQ000467747]* to support decision-making processes during the different phases of the pandemic: preparation, escalation, crisis (compensated), crisis (uncompensated), resolution, recovery, and normal working. The COVID-19 Cardiothoracic Surgery Escalation Framework set out the principles

to support decision-making at a local level. Whilst decision-making could be made within standard ethical practice initially, as resources became more limited, prioritisation of allocation of resources became paramount, bringing with it difficult decisions that needed to be made. This document provided guidance on how surgical units could adapt to the rapidly changing situation, understanding that different units throughout the country would face different stages of the pandemic according to the local prevalence of the disease and the response of healthcare providers.

12. Early in the pandemic, the SCTS collaborated with the British Cardiovascular Society (BCS) and British Cardiovascular Intervention Society (BCIS) to ensure service provision for patients with ischaemic heart disease through medical management, percutaneous coronary intervention, and coronary artery bypass grafting, according to the acuteness of presentation and severity of coronary artery disease, the availability of resources (intensive care unit capacity, theatre capacity, cardiac catheterisation lab availability), and the risks of intervention, particularly the increased risks of cardiac surgery in a COVID-positive patient.

13. The SCTS worked closely with the other nine surgical specialties through the Royal College of Surgeons of England (RCS) and the Federation of Surgical Specialty Associations (FSSA) to produce a '*Clinical Guide to Surgical Prioritisation During the Coronavirus Pandemic*' [NM/03 - INQ000226461] at the request of NHS England. The guide described the relative priorities of different conditions requiring surgical intervention and was updated regularly. There was detailed guidance on the management of patients with ischaemic heart disease depending on their clinical condition and acuteness of presentation, categorised as myocardial infarction with imminent death; coronary artery disease – unstable / resting ECG changes and not responding to conservative treatment; unstable non-ST-elevation MI; stable non-ST-elevation MI; and stable coronary artery disease. This prioritisation matrix was also documented in the '*NHS Clinical guide for the management of cardiothoracic surgery patients during the Coronavirus pandemic*' [NM/04 - INQ000467749].

14. In addition, the SCTS produced general advice on working in cardiac surgical theatres and maintaining the safety of cardiac surgical patients and staff during the pandemic that was circulated to all members [*Cardiothoracic Surgical Practice and Covid-19*, NM/05 - INQ000467750].

15. During the later stages of the pandemic, the SCTS collaborated with the Federation of Surgical Specialty Associations (FSSA), the Centre for Peri-operative Care (CPOC), the Royal College of Anaesthetists (RCoA), and the Royal College of Surgeons (RCS) to produce guidance on the timing of elective and urgent surgery on patients with COVID-19 infection [NM/06 - INQ000467751] and a document on '*Developing Safe Surgical Services for the COVID-19 era*' [NM/07 - INQ000467752].

Healthcare provision for ischaemic heart disease.

16. Cardiac surgery requires general anaesthesia, which necessitates endotracheal intubation for mechanical respiratory support with a ventilator during and immediately after the operation. Endotracheal intubation is an aerosol-generating procedure (AGP) involving placing a plastic tube into the central airways (the trachea). Because of this, anaesthetising a patient in preparation for cardiac surgery took much longer because of the need for the anaesthetic staff to wear additional personal protective equipment (PPE) and to reduce the degree of aerosol generation. It also required a period of up to 20 minutes after endotracheal intubation before the cardiac surgical team was allowed into the operating theatre. There were also concerns that any trauma to lung tissue, such as during harvesting of the left internal mammary artery in preparation for coronary artery bypass grafting, would be aerosol-generating, potentially making the conduct of surgery more challenging.
17. During the pandemic, the demand for intensive care unit (ICU) beds for patients with severe COVID-19 infection and its complications severely limited the availability of ICU beds for cardiac surgery. Advice from the government was to free up the maximum possible inpatient and critical care space, which included postponing all non-urgent elective operations, detailed in the '*NHS response to COVID-19*' letter [NM/08 - INQ000087317]. The numbers of healthcare professionals available to carry out and care for a patient undergoing cardiac surgery (such as theatre nurses, intensive care unit nurses, ward nurses, perfusionists, intensive care unit doctors and anaesthetists) were also significantly reduced. In addition, there were significant concerns about the safety of cardiac surgery in patients with COVID-19 or any radiological evidence of pulmonary involvement, with mortality of 24-37% for such patients [*Cardiac surgery outcome during the COVID-19 pandemic: a retrospective review of the early experience in nine UK centres*, NM/09 – INQ000477642].

18. As a consequence, during the initial phase of the pandemic, only ischaemic heart disease (IHD) patients requiring emergency or very urgent surgery were operated upon, resulting in a significant number of patients with IHD having their operations delayed until it was safe and feasible for them to be offered surgery. In many centres, patients who would usually have had surgery as the evidence-based best treatment for their coronary artery disease were offered percutaneous coronary intervention (coronary stenting) as an alternative because this does not usually require general anaesthesia and leads to a shorter hospital length of stay. In parallel with staffing shortages, there was difficulty in securing supplies for cardiac surgery, most notably equipment to place the patients on the cardiopulmonary bypass machine.
19. During the early phases of the pandemic, there were significantly reduced admissions of patients with IHD related to the Government's 'Stay at Home' advice, the fear of contracting COVID-19 within a healthcare facility, and the perception that healthcare provision was overwhelmed dealing with patients with COVID-19. Subsequent data have shown that many patients with ischaemic heart disease leading to angina or myocardial infarction may have missed out on potentially lifesaving or life-changing treatment during this period [*Impact of COVID-19 on cardiac procedure activity in England and associated 30-day mortality*, NM/10 - INQ000477643]. Although admissions for patients with ischaemic heart disease may have generally returned to pre-pandemic levels, most cardiac surgical centres have struggled to reach pre-pandemic levels of activity because of ongoing surgical and ICU capacity issues, leaving many patients facing excessive waiting times for treatment.

Infection Prevention Control (“IPC”)

20. Given the challenging and evolving scenario, the SCTS communicated regularly with all cardiothoracic surgical practitioners via email, social media, and the SCTS website with information on the appropriate infection prevention control (IPC) measures in surgical settings. Initially, the SCTS disseminated information from international publications, other UK organisations (such as the RCS), and leading local hospitals to support units in implementing effective infection prevention control strategies for the surgical environment, including best practice for wearing, donning and doffing PPE.

21. Once published, the SCTS adopted and circulated the UK Government's official guidance on infection prevention control in healthcare settings (*COVID-19 Guidance for infection prevention and control in healthcare settings Adapted from Pandemic Influenza: Guidance for Infection prevention and control in healthcare settings 2020 Issued jointly by the Department of Health and Social Care (DHSC), Public Health Wales (PHW), Public Health Agency (PHA) Northern Ireland, Health Protection Scotland (HPS) and Public Health England as official guidance*) [NM/11 - INQ000251675] to ensure the consistency of information given to cardiothoracic surgical units. The document provides guidance and information on infection prevention and control procedures to inform and advise local healthcare planning, and included details on known transmission characteristics of COVID-19, as well as PPE best practice. As the clinical situation evolved, the SCTS circulated updated information on best practices issued by the NHS.
22. Members expressed by verbal communications several specific concerns regarding infection protection control measures (IPC) in surgical settings, in relation to aerosol-generating procedures (AGPs), and staff and patient safety. These were managed by disseminating information on the infection prevention control (IPC) measures in surgical settings, as it became available, to the membership via email, social media, and the SCTS website.
23. Regarding AGPs, staff were concerned about the increased risk of contracting the disease for those either performing the procedure or in close proximity, especially before detailed information regarding virus transmission and understanding how best to protect staff during AGPs were known. Adequate ventilation was crucial to reduce the risks to staff and provide reassurance and confidence to staff to perform their roles safely. This was borne out by the increased risk to healthcare professionals involved in AGPs contracting the disease through nosocomial transmission of COVID-19.
24. Members also expressed concerns for staff safety because of inadequacies in PPE when performing both AGPs and non-AGPs: poor availability and the need to reuse equipment in the early stages of the pandemic, and poor-quality PPE later on. These concerns were most notable about respirator masks and gowns. Many staff also initially expressed concerns about training and guidance on donning and doffing PPE, especially in cases of confirmed COVID-19, leading to an increased risk of

contamination. The psychological impact of contracting the virus and transmitting it to family, especially vulnerable family members, should also not be underestimated.

25. Regarding patient safety, staff expressed their concerns about inadequate infection protection control measures to prevent nosocomial transmission, resulting in patients (as well as staff) acquiring the virus within the hospital environment, leading to severe or even fatal complications for vulnerable patients, such as the immunocompromised. The staff also expressed their concerns about the burden of excessive pre-operative testing and reduced resource allocation resulting in excessive delays to patient operations leading to additional harm.
26. Staff expressed significant concerns about the availability of COVID-19 testing. Testing was initially unavailable, then provided freely to all NHS staff, followed by limited test availability when the virus re-emerged. The fear of unknowing transmission to patients and family presented an additional psychological burden. The variable availability of COVID testing and delays in receiving results also impacted on the ability to schedule patients for cardiothoracic surgery. During the initial phases of the pandemic, there was uncertainty about testing protocols which contributed to confusion and delays.
27. As regards staff-related risk assessments, staff felt they were expected to complete these by themselves without sufficient guidance or objectivity. Many staff felt pressured to continue to work despite their underlying health conditions or personal risk factors because of the significant demands on the service at that time. There was also inconsistent application of the risk assessments across the different staff groups in terms of how the risk assessments were performed and the subsequent outcomes.
28. Amongst the issues raised regarding ventilation in surgical settings, there were concerns about the inadequacy of ventilation systems, especially in older operating theatres, difficulty in maintaining negative pressure in dedicated rooms, and the lack of easily accessible tools to monitor air quality.

As above, staff were significantly concerned about the quality and availability of PPE, especially those from higher-risk ethnic backgrounds and those with facial hair or wearing glasses because of ill-fitting face masks or poor stock of availability of the 'special' respirator hoods. On some occasions, PPE shortages led to the delay or cancellation of operations (exact numbers unknown). For many staff, operating in full PPE provided additional

difficulties relating to breathing, vision and communication (whilst wearing the face mask visors or respirators), as well as the physical discomfort of wearing PPE, resulting in pressure sores for some.

Staffing

29. There was a reduction in the number of cardiothoracic surgeons available during the pandemic because of several factors including:
 - a. surgeons who contracted COVID-19 requiring isolation. Unfortunately, some cardiothoracic healthcare professionals (including cardiothoracic surgeons) died following contracting the virus during the pandemic.
 - b. surgeons in the high-risk group for whom government advice was to stay at home.
 - c. redeployment of surgeons to other departments, such as the intensive care unit (ICU), respiratory department, emergency department, and to help with the extra-corporeal membrane oxygenator (ECMO) service.

30. The SCTS, however, does not believe that the reduction in the number of cardiothoracic surgeons available during the pandemic was the principal factor affecting the capacity to treat patients for ischaemic heart disease. As described above, ICU beds were scarce for cardiac surgery because of reallocation of these ICU beds for COVID-19 patients. In addition, the numbers of other healthcare professionals required to carry out and care for a patient undergoing cardiac surgery (such as theatre nurses, intensive care unit nurses, ward nurses, perfusionists, intensive care unit doctors and anaesthetists) were also significantly reduced. During the initial phases of the pandemic, only IHD patients requiring emergency or very urgent surgery were operated upon. A significant number of patients with IHD had their operations delayed, until it became safe and feasible for them to be offered surgery. In many centres, patients who would usually have had surgery as the evidence-based best treatment for their coronary artery disease were offered percutaneous coronary intervention (coronary stenting) as an alternative. Hence, the lack of the supporting infrastructure, as well as the potential increased risk to patients undergoing cardiac surgery led to the reduced capacity to treat patients for ischaemic heart disease, rather than the numbers of cardiothoracic surgeons per se. In fact, in some units, the extensive ITU skills, knowledge and expertise of cardiothoracic surgeons was not used, even though their services were volunteered.

31. The SCTS knows that many surgeons of all levels (including consultants, nationally appointed cardiothoracic surgical trainees and trust-appointed doctors) were redeployed during the pandemic to help other departments, such as the ICU, respiratory department, emergency department, and to help with ECMO (extra-corporeal membrane oxygenator) services. The SCTS does not have information regarding the exact numbers or level of experience of redeployed surgeons.

The impact on patients with ischaemic heart disease.

32. For many patients with IHD, the COVID-19 pandemic created unique challenges due to the complex perceived interactions between the fear of contracting the virus and access to healthcare services to treat their IHD. Access to healthcare facilities was difficult during the height of the pandemic, principally because hospitals prioritised their resources towards managing patients with COVID-19, resulting in reduced resources available for those with IHD, including access to out-patient clinic review, diagnostic investigations and operating theatres, as well as intensive care and ward bed provision. In addition, there was an acute shortage of staff to manage those with IHD, as many were redeployed to manage the pandemic. This was reinforced by the government's 'Stay at Home' messaging during the initial phases of the pandemic and was often misinterpreted by those with IHD not to seek medical attention.

33. There were also reports of delayed ambulance response times during the height of the pandemic caused by widespread disruption to the emergency services, resulting in delays for IHD patients requiring urgent or emergency care.

34. For patients with pre-existing IHD, there were challenges related to disruptions to the supplies of medications, limited access to routine care, and restrictions in lifestyle activities due to social distancing measures, such as exercise, which form a crucial part of their ongoing management. Information regarding challenges for IHD patients was provided by patients who subsequently attended healthcare facilities to seek medical attention, staff caring for these patients, and has been confirmed by numerous published studies [*The impact of the COVID-19 pandemic on cardiovascular disease prevention and management*, NM/12– INQ000477644, and *The impact of the COVID-19 pandemic on cardiology services*, NM/13 – INQ000477645].

35. Although emergency procedures for IHD, such as PCI and CABG, continued to be performed, access was variable across the country.
36. Patients also expressed their concerns about contracting COVID-19, especially those at higher risk for severe COVID-19 complications, which delayed them seeking medical attention due to fear of contracting the virus in hospitals. This potentially led to missed diagnoses, delayed treatment, and worsened outcomes.
37. Subsequent public awareness campaigns later on in the pandemic to encourage patients with heart attack and angina symptoms to seek medical attention despite the ongoing issues related to the COVID-19 pandemic, may potentially have mitigated some of the initial reduced attendance to hospital.
38. The increased use of virtual telephone and video consultations may have helped to mitigate reduced access to medical care, especially for stable IHD patients, whilst still reducing unnecessary hospital visits and potential exposure to the virus. While access has improved, there may be long-term consequences for patients who experienced delayed diagnoses or treatment.
39. The COVID-19 pandemic has had direct and indirect impacts on care for patients with IHD. At the height of the pandemic, elective cardiac surgery essentially stopped, especially in high-risk patients, due to the risk of contracting COVID-19 and the associated very high risk of mortality. This was particularly pertinent for IHD patients undergoing coronary artery bypass grafting, which for most patients includes the use of cardiopulmonary bypass with its associated systemic inflammatory response. In addition, cardiac surgery is associated with aerosol-generating procedures, prolonged hospital admission, and the requirement for level 3 ICU resources that had already been allocated to COVID-19 patients.
40. There was a substantial decrease in the number of all cardiac surgical procedures performed during the pandemic, including coronary artery bypass grafting (CABG) for IHD patients. This has led to an increased number of patients waiting for CABG surgery and longer waiting times for in the aftermath of the pandemic.
41. Longer waits for treatment have led to the progression of disease in IHD patients, causing patients more symptoms, an increased risk of myocardial infarction, and the potential for worse long-term outcomes due to heart muscle damage and remodelling

processes. Associated with this, the extended waiting times and limited access to medical care have caused increased anxiety and stress for patients already dealing with a serious health condition.

42. The delay in patients with IHD receiving early intervention has resulted in the need for more complex procedures, such as coronary artery bypass graft surgery rather than percutaneous coronary intervention, and more advanced procedures with higher risks of post-operative complications and increased mortality rates. This has implications for increased healthcare costs for managing patients with advanced IHD that require more complex interventions. In hindsight, services for delivering cardiothoracic surgery could potentially have been restarted sooner.
43. It is important to note that the specific impact on the need for coronary artery bypass graft surgery and patient outcomes varied across regions and healthcare systems, related to different resources and infrastructure available, and protocols implemented. Cardiac surgical services are still feeling the impact of the post-COVID backlog on cardiac surgical waiting times, as well as the acute staffing shortage encountered by the NHS currently, in some part related to staff burnout during the pandemic. Efforts are underway to address some of the backlogs and improve access to timely IHD care through several local, regional and national initiatives.
44. There are concerns that the pandemic might lead to a future increase in the number of people suffering from IHD due to reduced preventative care and diagnosis, with fewer diagnostic tests and consultations during the pandemic resulting in undetected and untreated cases of IHD, as well as lifestyle changes with increased stress, reduced physical activity, and potential changes in diet during the pandemic contributing to increased risk factors for developing IHD, such as high blood pressure, obesity and diabetes.
45. The experience of patients with IHD related to the delays in diagnosis, treatment and follow-up is likely to have negatively affected their disease management and progression. In addition, the increased anxiety and stress related to delayed treatment, impaired access to services, and a deterioration in clinical condition will have had significant impact on the mental health and well-being of these patients. Social distancing measures may have increased feelings of isolation and loneliness, potentially worsening anxiety and depression in some patients.

46. As above, the pandemic affected the quality of care delivered to patients with IHD with reduced access to specialists, and delays in diagnostic and interventional procedures. In addition, during the initial phases of the pandemic, only the attending team were allowed to perform basic life support rather than the specialised Advanced Life Support team because of concerns about virus transmission. Also, for those performing cardiopulmonary resuscitation (CPR) on patients with IHD, commencement of CPR was delayed until full PPE had been donned, potentially adding time before heart and brain blood supply was restored. This was documented in the NHS England guidance, which stated PPE must be worn by all members of the resuscitation team, as well as the Resuscitation Council guidance, because of the risks of generating an infectious aerosol during CPR. [*Clinical management of persons admitted to hospital with suspected COVID-19 infection*, NM/14 - INQ000000078, and *Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in acute hospital settings*, NM/15 – INQ000477646].
47. There are several initiatives planned to address the backlog, reduce waiting times, and restore pre-pandemic levels of service, including waiting list initiatives, increased use of virtual consultations and telemedicine, ring-fencing of level 2 and 3 ITU beds, use of private sector facilities, as well as day-of-surgery admission (DOSA) and Enhanced Recovery after Surgery (ERAS) programmes.
48. Lifting of social distancing measures has helped with the reintroduction of cardiac rehabilitation programmes and support groups, which play a crucial role in helping patients manage their IHD and improve their overall well-being in the long term.
49. One of the unexpected benefits of the COVID-19 pandemic was the acceleration of the introduction of technology to allow video conference communication both for staff with multi-disciplinary team meetings, education courses and webinars but also for patients through virtual consultations that reduced the need to travel. These benefits have been maintained and improved in current practice.
50. It is clear, however, to also see the negative effects of the pandemic on the mental health and well-being of staff working in cardiac surgery departments. The pandemic has left many staff suffering from burnout and the subsequent poor working conditions in many departments has resulted in very low morale. The increased workload and waiting lists have put significant stress on many departments and their staff, resulting in many staff leaving contributing to the acute staffing crisis within the

NHS, with problems of both retention and recruitment. A lack of recognition for the hard work that staff put in during the pandemic has resulted in disastrous consequences for the health service. It is hoped that lessons learnt from the pandemic will result in improved working conditions for healthcare staff because the health service is at a critical tipping point unless major changes are implemented. It is crucial that NHS employers act urgently to redress this.

51. The impact of the COVID-19 pandemic on patients with IHD was not equally distributed. There are several factors that contributed to the potential disparities, including:
- a. socioeconomic status – patients from lower socioeconomic groups had less access to preventative care, such as seeking regular check-up and screening appointments for IHD, potentially leading to delayed diagnoses. This group of patients are more vulnerable to lifestyle risk factors, including stress related to financial difficulties, and limited access to healthy food options, which contribute to cardiac risk factors, such as obesity and diabetes.
 - b. racial and ethnic background – certain racial and ethnic groups faced a higher burden of disease due to pre-existing health conditions, as well as reduced access to quality healthcare and social support.
 - c. elderly patients – who were at higher risk of severe COVID-19 complications that might have led to a reluctance to seek medical help for IHD symptoms due to a fear of contracting COVID-19 in healthcare settings. Social distancing measures were detrimental to mental health and access to support systems for elderly IHD patients.
 - d. digital divide – patients with limited access to technology or digital literacy faced difficulties accessing virtual consultations and obtaining reliable health information on treatment, such as where to access cardiac health care and medications.

The impact on SCTS's members.

52. The COVID-19 pandemic significantly impacted the mental health and well-being of cardiothoracic surgical practitioners due to several factors including:
- a. increased workload – the need to manage critically ill COVID-19 patients alongside their regular cardiac surgical caseload (including IHD patients) led to increased stress and burnout.

- b. witnessing patient suffering – the high number of critically ill patients and deaths, both from COVID-19 and IHD complications, took a toll on their mental well-being. In addition, there was the knowledge that many patients with ischaemic heart disease were coming to harm because they were not able to access the usual standard of care.
 - c. increased complexity of operation – related to performing complex cardiac surgery on COVID-19 positive patients, where the risks of mortality were thought to be around 25-37%, as well as dealing with the multiple complications associated with COVID-19 following cardiac surgery.
 - d. reduced operating – which was particularly pertinent for cardiothoracic surgical trainees and those who had just started their career as a consultant surgeon.
 - e. performing cardiothoracic surgery with full PPE – which brought its challenges due to the complexity of surgery with long operations (typically 4-6 hours in length but sometimes up to 10-12 hours), whilst having to wear additional protection causing overheating, difficulty breathing, and difficulty in communication due to the presence of masks and visors.
 - f. the fear of contracting COVID-19 –the constant risk of exposure to the virus while performing surgery, especially if it involved in aerosol generating procedures, caused significant anxiety and fear.
 - g. ethical dilemmas – where surgeons faced difficult decisions regarding prioritising operations and resource allocation during peak pandemic periods, including the necessity of delaying essential IHD surgery due to resource limitations.
 - h. disruptions to work-life balance – because of long working hours, social distancing, and the potential fear of unknowingly transmitting the virus to family members.
53. The SCTS set up a Mental Health and Well-being Working Group to address these issues and support its staff, as part of increasing awareness and recognition of the problem, and normalising the need to seek help. The SCTS has added several resources to its website and advice on where to seek help if experiencing the symptoms related to mental health, such as stress, anxiety, burnout and post-traumatic stress syndrome. The SCTS also sent regular emails to its members to provide a central source of support during the difficult times experienced by healthcare professionals caring for patients undergoing cardiac surgery.
54. The SCTS was aware of the numerous initiatives at a local level within hospital Trusts to support their employees, and disseminated learning from these initiatives,

as well as collaborating with other organisations, such as the Royal College of Surgeons (RCS) and Federation of Surgical Specialty Associations (FSSA) to support surgeons during these difficult times. One important aspect was to support flexible working arrangements to cater to individual needs, especially ensuring a balance with home life and caring responsibilities (for both children and elderly relatives), at a time when obtaining external support was difficult. The SCTS has recognised the ongoing need to help its members in this aspect, with further initiatives to support cardiothoracic surgical practitioners, as well as supporting audit to investigate the prevalence and research projects to determine the best approaches to help.

55. Although the COVID-19 pandemic significantly impacted all healthcare practitioners caring for patients undergoing cardiothoracic surgery, its effects were not equally felt across all groups.
56. Most notably, Black, Asian, and Minority Ethnic (BAME) staff members in the NHS were disproportionately affected by COVID-19 infections and mortality. This is thought to be related to several factors, including over-representation in high-risk frontline posts, with higher exposure risks; roles that gave less opportunity to work from home; socioeconomic factors, such as living conditions with limited opportunity for social distancing and reduced access to vaccination programmes; and a preponderance to pre-existing medical conditions that increased the risk of contracting the disease and severity experienced.
57. In addition, it was noted that nurses, healthcare assistants and healthcare workers that had closer contact with patients faced a greater exposure to the virus and were at greater risk of a higher viral load and contracting the disease. Staff with pre-existing health conditions or disabilities faced a higher risk of complications from the virus, as well as potential anxieties about returning to work.

Recommendations

58. The Society's recommendations for the NHS to mitigate the impact of a future pandemic fall into three categories: enhanced pandemic preparedness and planning; a greater infrastructure to support staff well-being; and addressing the inequities of access and quality of care for patients.

59. *Enhanced Pandemic Preparedness and Planning.* The National Health Service across all four nations should develop a comprehensive pandemic preparedness plan, including resource allocation, staffing, surge capacity, communication strategies, enhanced local, regional and national support networks to encourage collaboration and sharing of best practices, and guidelines for prioritising essential surgery during outbreaks, including provision of COVID 'lite' hospitals (such as surgical hubs to allow continuation of elective / urgent work, whilst maintaining an ability to service COVID-positive patients within the main hospital infrastructure). It is vital to maintain adequate stockpiles of essential supplies and personal protective equipment (PPE) to ensure continued delivery of care, even during disruptions to regular supply chains. In parallel, the NHS should conduct regular major incident simulation and training exercises to help prepare staff and identify potential challenges. The increased use of technology can help to support remote areas of the country, thereby increasing access to care.
60. *Supporting staff well-being.* The importance of implementing a robust mental health and well-being programme to cope with the surge demand during a pandemic cannot be under-estimated. This should include access to confidential counselling services, stress management techniques and peer support groups. Ensuring flexible working arrangements are possible would help alleviate some of the stresses associated with delivery of healthcare during a pandemic and reduce the risk of burnout. Importantly, developing a programme to recognise and acknowledge the contributions of staff will foster a supportive and positive work environment. In particular, the NHS has a responsibility to ensure that all staff groups are both protected from contracting the disease and provided support for mental health and well-being to redress the inequalities seen during the COVID-19 pandemic.
61. *Addressing the inequities of access and quality of care.* As part of learning from the COVID-19 pandemic, it is crucial that the NHS recognises the disparities in access to care to ensure equitable service delivery during any future pandemics but also during 'business as usual'. The government should develop and implement strategies to address these disparities in preventive care, diagnostics, and treatment for IHD patients from all backgrounds. An example would be to develop targeted outreach programmes to access vulnerable populations with essential health information and resources specifically tailored to their needs, as well as investing in a telemedicine

infrastructure to ensure its accessibility for all IHD patients to bridge potential gaps in care delivery.

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: 17/05/2024