Witness Name:	Paul Bassett
Statement Number:	1 - Module 3
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UK COVID-19 INQUIRY

WITNESS STATEMENT OF MR PAUL BASSETT

I, Paul Bassett, of the Scottish Ambulance Service, will say as follows:

1. I am the Deputy Chief Executive and Chief Operating Officer within the Scottish Ambulance Service (SAS). I make this witness statement in response to a Request for Evidence under Rule 9 of The Inquiry Rules 2006 issued by the UK Covid-19 Public Inquiry, which SAS received via letter through our legal representation on 2 May 2023.

2. I make this witness statement on behalf of the SAS, in my capacity as the Deputy Chief Executive and Chief Operating Officer. This role has been in place in the SAS since November 2021. Prior to this, I held the position of Director of National Operations, a role which is responsible and accountable for performance achievement and direct delivery of the national operational services.

3. The facts and matters addressed in this witness statement are based on my own knowledge and that of relevant colleagues who held key roles in the SAS in the lead up to and during the relevant period as outlined in the Rule 9 notice.

4. These colleagues have much more detailed knowledge of the work in specialist areas, and it is my belief that they have diligently and fairly reported to me the relevant information that I set out below. My statement should therefore be read as representing the collective understanding and knowledge of the SAS in relation to 1 March 2020 to 28 June 2022 (the relevant period) to which Module 3 refers.

Overview of the Scottish Ambulance Service

5. The Scottish Ambulance Service was established in 1999 under The Scottish Ambulance Service Board Order 1999, which amended the National Health Service (Scotland) Act 1978. Through the course of this witness statement, the Scottish Ambulance Service will be referred to as either 'SAS' or 'the Service'.

6. The SAS serves a population of circa 5.5 million people in Scotland and covers the largest geographical area of any ambulance service in Europe. Based in 150 locations throughout Scotland, the SAS is responsible for a range of services. Under the Civil Contingencies Act 2004 and The Civil Contingencies Act 2004 (Contingency Planning) (Scotland) Regulations 2005, the SAS is also a Category 1 responder for national emergencies.

7. The SAS is best known for its traditional role of responding to emergency medical need in the community. But the modern-day Service provides a far broader range of specialist services that it delivers as part of the wider NHS Scotland service delivery.

8. First and foremost, the SAS provides emergency ambulance response to patients presenting with immediately life-threatening or serious symptoms. The SAS also provides urgent care which involves responding to any non-life-threatening illness or injury needing urgent attention and to patients who require transfer to and from specialist treatment centres. Immediate life threatening and urgent calls are usually referred to as unscheduled care. This part of our Service is staffed by over 3,340 Paramedics (autonomous generalist registered clinicians working in an emergency health care setting), Technicians (autonomous non-registered clinicians who normally support Paramedics on a double crewed ambulance), and Ambulance Care Assistants (autonomous staff that transfer patients to and from a hospital setting). The SAS are a key stakeholder in Scotland's Out-of-Hospital Cardiac Arrest Partnership and Scotland's Trauma Network.

9. Furthermore, the SAS provides primary care which is healthcare provided in the community for people making an initial approach to the health service that is neither urgent nor an emergency. For example, SAS has 140 Advanced Paramedics (or Nurse Practitioners) Urgent and Primary Care (APUPC) (highly qualified and trained autonomous practitioners (Paramedics and Nurses) who provide more complex patient

care in urgent and primary care settings) who working a rotational role providing enhanced care and treatment options closer to home for patients who call 999. They do this either face-to-face, or via telephone or video platforms whilst undertaking remote consultations. They also provide additional workforce within local Primary Care and out of hours services across Scotland.

10. Our unscheduled care service is also supported by Advanced Practitioners in Critical Care (APCC). These are registered paramedics with additional skills that provide advanced clinical interventions and high-level decision making in support of critically ill or seriously injured patients with the aims of improving their chances of survival, reducing the risk of future disability and minimising pain and distress. The APCC have a multi-purpose role, supporting frontline clinicians dealing with complex or clinically challenging scenarios from our Critical Care Desk in the ambulance control centre and assisting with early identification of patients requiring an enhanced level of clinical response, alongside our consultant-led pre-hospital critical care teams (Emergency Medical Retrieval Service described at Para 19) at incidents, and as autonomous advanced practitioners tasked as a secondary response to assist 999 crews with critically ill or seriously injured patients

11. The SAS provides Patient Transport Services (PTS) for patients who require medical assistance travelling to and from healthcare facilities. PTS provides care for patients who need support to reach their healthcare appointments due to their medical and mobility needs. PTS demand is usually referred to as 'scheduled care'. This service is delivered by a team of Scheduled Care Coordinators (staff who work with managers, carers, and patients to plan, book and schedule transport for patients with medical needs to and from healthcare facilities) and Ambulance Care Assistants with a fleet of approximately 500 vehicles. PTS delivery is through pre-arranged transport and live day requests. However, PTS staff can also be used to support their accident and emergency colleagues.

12. In support of our trained staffing compliment, we are supported by circa 1,000 volunteer Community First Responders, Cardiac Responders and British Association of Immediate Medical Care Scotland (Basics) Responders who dedicate time and effort to support us. Our volunteers provide essential support to our aim of delivering sustainable and effective care, treatment, and a good patient experience to our patients. Volunteer responders work to their respective, clinically assured, Scope of

Practice and respond to a range of Immediate Life-Threatening emergencies, categorised as Purple/Red calls, providing important Pre-Hospital Emergency Care: for example a patient in respiratory or cardiac arrest, or a patient who is experiencing a serious or life-threatening medical condition such as a stroke, chest pain, breathing difficulties or choking. Volunteer responders will also respond to lower acuity calls which fall within their Scope of Practice. Cardiac Responders only respond to patients in cardiac arrest. BASICS Responders are clinical professionals who volunteer for the Service and attend trauma related incidents.

13. Volunteer responders are dispatched, predominantly via Airwave Radio, by the Alternative Response Desk within the Ambulance Control Centre (ACC), supported by the broader ACC structure. Alternatively, Cardiac Responders are deployed via the GoodSAM mobile application. Volunteer responders undertake mandatory training and competency assessment. The content and duration of the course is dependent on their respective Scope of Practice and ranges from half a day for a Cardiac Responder to four days for a Community First Responder.

14. The Scottish Government Health and Social Care Directorates require the SAS to maintain an on-going, national specialist operational response capability to provide patient care in hazardous environments on behalf of NHS Scotland. Situated within the National Risk and Resilience Department, the SAS has three Special Operations Response Teams (SORT) comprising specially trained paramedics to meet the requirements of the Scottish Government, SAS, public and partner organisations. SORT have developed a range of specialist capabilities based on the key concept of working within hazardous areas of an incident. These capabilities have also been developed based on the risk and threat assessments for a range of credible scenarios and are as a direct result of funding provided to the SAS by the Scottish Government. The capabilities of the Scottish SORT are comparable and interoperable with English and Welsh Hazardous Area Response Teams (HART), so that mutual aid can be provided between teams for large or prolonged incidents within the UK.

15. The Resilience Teams based across Scotland support the Service in our emergency preparedness, working with key partners to inform emergency plans for major/significant incidents, Control of Major Accident Hazards (COMAH) sites and radiation emergencies.

16. In the SAS, we have the Scottish Specialist Transport and Retrieval (ScotSTAR) department which provides a national service for the safe and effective transport and retrieval of critically ill neonates, children, and adults in Scotland. ScotSTAR was launched on 1 April 2014 and brought together three existing services into one specialist service.

17. These services provide a safe and dedicated transport service for a particular patient group who, because of their clinical condition, require an augmented clinical team during retrieval/transport, and represent the most vulnerable of patients transported in Scotland.

Scottish Neonatal Transport Service (Neonates)

18. The Neonatal Transfer Service works nationally and undertakes transfers and retrievals of babies up to five kilograms using a team comprising up to three clinicians, including Consultants, Advanced Neonatal Nurse Practitioners (ANNPs), training grade doctors and Transport Nurses.

Scottish Paediatric Retrieval Service (Paediatrics)

19. The Paediatric Retrieval Service provides for paediatric patients up to 16 years old. Typically, the team is Consultant led, supported by training grade doctors, Advanced Nurse Practitioners and Transport Nurses. The team also works closely with Paediatric Intensive Care Unit (PICU) partners, providing telephone advice to referring clinicians.

Emergency Medical Retrieval Service (Adults)

20. The Emergency Medical Retrieval Service (EMRS) provides national retrieval services 24 hours a day. These can be categorised into primary and secondary retrieval:

- Primary retrieval is when EMRS provides pre-hospital emergency critical care as part of the SAS 999 response. For example, at the scene of a road traffic accident where a patient is severely injured. EMRS provides primary retrieval care for patients of all ages.
- Secondary retrieval is the transfer of critical care patients between hospitals especially in support of remote and rural healthcare facilities throughout Scotland. EMRS provides secondary retrieval only for adults.

21. As part of ScotSTAR, the Service operates two fixed-wing aircraft and two rotary aircraft, which are based in Aberdeen, Glasgow, and Inverness. In addition, Scotland's

Charity Air Ambulance provides additional support through the provision of two rotary aircraft, based in Perth and Aberdeen.

Changes to our Operating Model

22. As a result of the pandemic, we made some minor changes in how we operate which I have noted below:

23. Advanced Paramedic urgent and primary care remote consultation was introduced within the SAS in response to the Covid-19 pandemic in May 2020 as a means of managing patients safely especially during periods of high demand on the Service, mitigating the need for direct patient contact where possible, whilst ensuring patients continued to receive a high standard of care in the right place at the right time.

24. In March 2020, the decision was taken to stand down the volunteer responders, primarily to ensure their safety, but also to support the prioritisation of PPE across the service. On a phased basis, volunteer responders resumed attending calls, within their clinically agreed Scope of Practice, from September 2020 with additional training and supply of PPE.

25. In addition to these, there were three significant changes to the SAS operating model which were made as a direct result of our response to the pandemic:

26. The Service was tasked by Scottish Government with taking on responsibility for the management of Mobile Testing Units (MTUs) from the Military on 31 August 2020. These MTUs played a vital role in helping tackle the pandemic by supporting the rapid roll out and delivery of testing sites across the country. As part of the national Covid-19 testing programme, the Service quickly recruited 1,300 new staff to set up a total of 39 MTUs funded by the UK government. The external recruitment of 1,300 staff was undertaken directly by the SAS in a matter of weeks and supplemented a small number of existing SAS staff that were allocated to MTUs to prime the process. This alleviated considerable pressure on front line staff by ensuring that appropriate testing regimes were in place across the country. The MTUs had the capacity to cover 72 deployment sites across Scotland. The establishment of the MTUs was one of the biggest projects ever carried out by the SAS.

27. By the beginning of 2022, MTUs reached the monumental milestone of having delivered two million tests across Scotland. As the country faced further challenges with the Omicron variant, the MTUs were delivering 18,000 tests a day. By March 2022, the SAS started to reduce the number of MTU operatives it employed as it was decided, by Scottish Government, that testing would be scaled back with the last testing date of 30 April 2022. The MTUs operated with reduced numbers of staff and teams until the decision was taken, by Scottish Government, to decommission this service from 30 September 2022.

28. In addition to the MTUs, the SAS established a Mobile Vaccination Programme, working with Scottish Government and Territorial Health Boards which supported vaccine delivery to hard-to-reach areas of the population. This programme was established by a small cohort of management staff from within the SAS. They recruited a team of 12 staff (vaccinators, team leads and an operational manager), two of which were redeployed SAS staff, and the remaining were new staff from nursing and clinical backgrounds. Once the team was established, the management staff returned to their substantive posts and there was no negative impact on the Service as a result of their involvement in setting up this programme. Throughout 2021-22 the vaccination teams delivered over 53,000 Covid-19 and Flu vaccines during 360 deployments across Scotland. The teams continued to support Health Boards during 2022-23 and now 2023-24 allowing populations in remote, rural and socially deprived areas of Scotland to access vaccinations through the mobile clinics.

29. In March 2020, a temporary hospital with an initial sizing of 300 beds was created in the Scottish Events Campus in Glasgow to increase patient capacity during the Covid-19 pandemic. The Louisa Jordan Hospital (LJH) build was a short notice project during which the SAS were asked to provide a service to transfer patients to the temporary hospital from other facilities as part of their care pathway. This included admissions, discharges, and inter-hospital transfers. The SAS built an operational ambulance station to facilitate the task, the total build time was approximately two weeks. The staffing of the ambulances was achieved through utilising third year paramedic students who were employed as Technicians. Six ambulances were allocated to the LJH facility and ambulance crews were utilised to support normal operations whilst not required to support LJH. The crews moved more than 6,000 low acuity patients which significantly reduced the pressures on our regional operations. The ambulance station remained operational until the Louisa Jordon Hospital was closed on 31 March 2021.

Strategic Leadership

30. The Board has collective responsibility for the performance of the SAS as a whole, and reflects the partnership approach, which is essential to improving health and health care. Under the terms of the Scottish Health Plan, the SAS Board is a Board of Governance whose membership is conditioned by the functions of the Board. Members of Health Boards are selected on the basis of their position or their particular expertise which enables them to contribute to the decision-making process at a strategic level.

31. The Service is led by a Board of Directors which meets in public quarterly and comprises the Chair, nine non-executive directors, and three executive directors: the Chief Executive, the Director of Finance and Logistics, and the Medical Director. As a member of the Service's Board, the Chief Executive fully contributes to, and participates in delivering the Board's governance accountabilities. Day to day operation of the SAS is delegated to the Chief Executive. The Chief Executive is supported by an Executive Team of nine staff. The individual roles in this team are listed below, along with a synopsis of the responsibility of the role and the name(s) and dates of which staff occupied these roles during the relevant period:

32. Chief Executive – Pauline Howie OBE. The Chief Executive leads on providing information from the Executive Team on strategy development, strategic progress, and corporate management activity to the SAS Board. This role drives forward a positive culture of collaboration with stakeholders and partners whilst ensuring that the workforce is developed and supported to deliver organisational strategic priorities. As a key national leader the role progresses and supports the delivery of ministerial targets.

33. Chief Operating Officer / Deputy Chief Executive – Paul Bassett QAM (11/2021 to present). This role is responsible for leading and directing the operational delivery of high-quality emergency, urgent, planned, primary and mental health care to the population of Scotland. The role deputises for the Chief Executive across the full range of responsibilities as and when required. The role has only been in place since November 2021.

34. Director of Finance, Logistics and Strategy – Julie Carter. This role is responsible for designing and leading strategic direction, performance management and governance of the SAS, including systems of internal control to provide external assurance on the integrity and completeness of financial activities. The role provides professional leadership for the Finance, Logistics and Strategy Directorate ensuring the development and implementation of the Board's strategy and objectives. The role also takes the lead on the identification and management of corporate level risk.

35. Medical Director – Dr James Ward. This role is responsible for providing strategic medical and corporate leadership and advice to the Board. The role influences and leads clinical change to deliver implementation of the Board's strategy and objectives. It ensures that the highest level of clinical care is maintained and that robust clinical governance systems are in place whilst ensuring that the clinical workforce is deployed to best effect. Dr Ward is the Caldicott Guardian for the Service.

36. Director of Care, Quality and Professional Development – Emma Stirling (11/2022 to present) and Frances Dodd (02/2020 to 09/2022). This role is responsible for the professional and clinical leadership of healthcare professional staff including Paramedics and Nurses and for ensuring the highest possible quality of care experience for our patients, enabled by robust systems of education, training, professional development and support. The role is also responsible for the education and development of Technician and Ambulance Care Assistant staff. Finally, the Mobile Vaccination Unit teams report to this role.

37. Director of Workforce, Avril Keen (11/2021 to present) and Lyndsay Lauder (01/2020 to 12/2021). This role is responsible for leading the planning, transformation and redesign of the SAS workforce which is critical to the successful delivery of NHS Scotland's ambitious programme to reform and improve health and care services. The role is responsible for providing leadership and professional advice at Board level on workforce, human resources and organisational development strategy and practice.

38. National Operations Director – Stephen Massetti (from 07/2022 to present), Matthew Cooper (11/2021 to 07/2022) and Paul Bassett QAM (06/2017 to 10/2021). This role is responsible and accountable for performance achievement and direct delivery of the national operational services. This includes all areas of Service delivery covered by the National Risk and Resilience Department (NRRD), the Ambulance Control Centres (ACC), and the Scottish Specialist Transport and Retrieval Service (ScotSTAR).

During the period of the pandemic the role was also responsible for the Mobile Testing Units. The role ensures that the devolved arrangements of Ambulance Services, Financial Management, Human Resources, Business Continuity, Stakeholder engagement, resilience and preparedness, and local communications operate effectively and meet the standards and targets agreed by the SAS Board, Scottish Government, Regional Planning Groups, NHS Boards, fellow Emergency Services, and other partners.

39. North Operations Director – Milne Weir. This role is responsible and accountable for the delivery of high-quality services to patients through professional and motivated staff and well-developed systems within the North Region. It ensures that the devolved arrangements of Ambulance Services, Financial Management, Human Resources, Business Continuity, Stakeholder engagement, resilience and preparedness and local communications operate effectively and meet the standards and targets agreed by the SAS Board, Regional Planning Group, NHS Boards, Integrated Joint Boards (IJBs), Emergency Services and other partners.

40. East Operations Director- Kenny Freeburn (07/2021 to present), David Robertson (01/2021 – 07/2021), Lewis Campbell QAM (06/2017 to 01/2021). This role is responsible and accountable for the delivery of high-quality services to patients through professional and motivated staff and well-developed systems within the East Region. It ensures that the devolved arrangements of Ambulance Services, Financial Management, Human Resources, Business Continuity, Stakeholder engagement, resilience and preparedness and local communications operate effectively and meet the standards and targets agreed by the Service Board, Regional Planning Group, NHS Boards, Integrated Joint Boards (IJBs), Emergency Services and other partners.

41. West Operations Director – David Robertson (07/2021 until present), Garry Fraser QAM (06/2017 until 06/2021). This role is responsible and accountable for the delivery of high-quality services to patients through professional and motivated staff and well-developed systems within the West Region. It ensures that the devolved arrangements of Ambulance Services, Financial Management, Human Resources, Business Continuity, Stakeholder engagement, resilience and preparedness and local communications operate effectively and meet the standards and targets agreed by the Service Board, Regional Planning Group, NHS Boards, Integrated Joint Boards (IJBs), Emergency Services and other partners.

42. The Inquiry Team is asked to note that the SAS is not responsible for 111 services in Scotland. This service is managed by NHS24.

Incident Management Leadership

43. In March 2020, the SAS predominantly focussed its response by aligning to the command structures designated in the SAS Major Incident Plan. The Major Incident Plan is the SAS document that describes how the Service will respond to an emergency as directed under the Civil Contingencies Act. This alignment involved the identification of Strategic, Tactical and Operational Command Structures.

44. The SAS National Command and Co-ordination Centre (NCCC) was opened initially on a 9am to 5pm basis. The NCCC is a purpose built facility within the National Risk and Resilience Department at I&S The NCCC provides the facilities to co-locate key managers and gather both internal and external data to inform the response to any significant or major incident. It also provides the ability for the electronic logging of decision making, and the generation of reports as required by Scottish Government and other partner agencies. The NCCC was staffed by the Incident Director who had the responsibility for Strategic Command of our response to the 'incident'. They were supported by a Strategic Advisor, Staff Officer, and Loggist. As the number of infections increased, there was a proportionate increased of reporting to Scottish Government, engagement with Health and Social Care partners, and growing uncertainty about the impact of the virus. As a consequence, by mid-March 2020 the Strategic Cell moved to operating 16 hours per day, and the Strategic Command of our response was then shared between three Strategic Commanders (including the Incident Director).

45. A Tactical Cell was established based within the NCCC which operated 24 hours a day and provided national oversight and co-ordination of the Service response. This was staffed by a Tactical Commander, Tactical Advisor, Clinical Lead, Control Dispatcher and Loggist. Additional support to the Tactical Cell was provided by Health and Safety, Infection Prevention and Control and Communications colleagues.

46. Within our operational regions across Scotland (North, East and West), each region established a regional Covid-19 Cell. Cells were also established for National Operations within both the Ambulance Control Centre and Specialist Operations. These Cells co-ordinated local activity, including the monitoring of staff absence,

resource levels, vaccination and testing, personal protective equipment (PPE) and consumable supplies.

47. Conference calls were held daily with all the regional Cells and the wider departments across the Service. These were chaired by the Tactical Commander and each Cell was required to report on their mobilisation plans, local issues, and emerging risks. Where appropriate the Tactical Cell raised these for consideration by the Strategic Cell.

48. The Executive Management Team met with the Strategic Commander daily and were provided with the most current update in terms of the Service position. These meetings included a regular deep dive into mobilisation plans that were provided by each of the Regional Operations Directors. The mobilisation plans took modelling data that had been compiled by our management information teams, based on pandemic modelling from Public Health Scotland. This data considered the predicted reasonable worst-case scenario in terms of service demand and anticipated abstractions, as well as the current actual position, regional Cells provided their planned mitigations to maintain service delivery during this period.

49. As we approached June 2020, there was a greater understanding of the impacts of the pandemic and a more established structure (as outlined in paragraphs 44-46 above) in terms of the management and co-ordination of resources, and supplies. Consequently, the initial Incident Command Structure was scaled back, the Tactical Cell initially closed moving the operational oversight of the response back into business-as-usual arrangements. The Regional Cells remained open and continued to provide local support to manage PPE distribution, staff absence, local engagement and communications.

50. The Strategic Cell was stood down in June 2020, when the Incident Management Team (IMT) formally took over. The IMT was chaired by the Chief Executive and the focus moved from mobilisation to re-mobilisation and recovery. This was in line with a scaling back across all Health Boards and Scottish Government of the pandemic response and a clear strategic direction to focus on the recovery phase. Service impacts had remained lower than the best-case scenario in the forecasted models, absence levels had stabilised, and there was growing confidence in PPE supplies and operational procedures at this point. There was no direct impact from the transition to business as usual as modelling continued to be forecasted, and there was ongoing

monitoring of the information on emergent strains. The experience of establishing Cells from phase 1 was used to roll out the subsequent response in future waves in a timeous manner.

Decision Making Environment

51. In the initial phases of the pandemic there were regular updates and changes to the advice in how to respond to the pandemic. The combination of devolved health care structures, UK central advice and greater levels of connectivity by staff and patients through electronic communications often proved problematic. Information on the type of PPE or the impact of specific clinical procedures (aerosol generating activities for example – where a procedure can release particles of bodily fluids into the air in aerosol form) was often released centrally by Public Health England, and this was then communicated widely across the UK.

52. There were two challenges with communications of this information. First, at times, the information was updated several times a day leading to rapidly changing advice about PPE. No doubt this was a direct consequence of rapid learning about the virus, but it had the effect of eroding the confidence of the front line crews on the validity of the information they were being given. For example, how could they trust what they were being told in the morning when by the afternoon they were being told something different.

53. Secondly, erosion of crew confidence was compounded by times when the advice publicised by Public Health England had not yet been release by Scotland's health care structures leading to two sets of advice being communicated at the same time. Again, a reflection of the rapidly changing situation.

54. In responding to the pandemic across both Patient Transport and Accident and Emergency Services, the SAS was able to work in conjunction with Scottish Health Boards to understand the unscheduled care demand and plan services appropriately. Information that SAS received included a weekly model of predicted Covid-19 hospital admissions and Covid-19 cases in the community from the Scottish Government. We used the information provided and past information to understand the relationship between this and potential SAS demand. For example

- COVID hospital admissions correlated with suspected COVID patients attended by SAS
- COVID cases in the community correlated with COVID abstractions of SAS staff

55. This information, along with our own intelligence and assumptions enabled the SAS to model the impact of different scenarios of Covid-19 waves and easing of lockdown measures. These models were reviewed on a weekly basis to ensure that current assumptions and scenarios were up to date. In terms of the information the SAS provided, we provided a daily data extract of suspected Covid-19 patients and other SAS Accident and Emergency demand to Public Health Scotland to assist with their intelligence gathering. Furthermore, in relation to Accident and Emergency Services, the modelling, coupled with the patient escalation and triage measures that were introduced, allowed the Service to flex continually in relation to demand. Details in how we flexed services in relation to demand is explained in the section relating to the Resource Escalatory Action Plan (REAP Plan) in paragraph 64 below.

56. There were regular meetings with Scottish Government across all service functions including Chief Executives, Medical Directors, Workforce Directors and Finance Directors which ultimately fed back into the Scottish Government Resilience Room and the Scottish Government. Matters discussed at these meetings included clinical practice, clinical guidelines, PPE, funding and system wide challenges. Daily reports were provided relating to the provision of PPE, number of staff fitted with Filtering Face Piece Level 3 (FFP3) masks, availability of resources, system wide challenges and vaccination numbers.

57. During the initial phases of the pandemic, it felt as if there was a significant amount of duplication both in terms of meeting attendance and information supplied. Perhaps unsurprisingly given the nature of the pandemic, the primary form of information coming back to the Service was from public health colleagues.

Financial Governance

58. Under Section 15 of the Public Finance and Accountability (Scotland) Act, 2000, The Principal Accountable Officer (PAO) of the Scottish Government appoints the Chief Executive as the Accountable Officer of the SAS Board. This designation carries with it a responsibility for:

- the propriety and regularity of financial transactions
- the economical, efficient, and effective use of resources placed at the Board's disposal; and
- safeguarding the assets of the Board.

59. A Scheme of Delegation, Standing Orders and Standing Financial Instructions are in place to describe the internal controls and governance that allows this to be discharged to budget holders. This responsibility covers all of the SAS including clinicians, call handlers, support staff and fleet.

60. The Chief Executive, as the Accountable Officer, supports compliance with the Board's policies and promotes achievement of the Service's aims and objectives, including those set by Scottish Ministers.

61. Throughout the Covid-19 pandemic, the internal control framework (through the scheme of delegation, standing orders and standing financial instructions) remained in place. Supplementary Covid-19 guidance was issued in April 2020 to all staff that aimed to ensure the Service could track all costs associated with Covid-19 and that the strategic objectives of the Service's response to the pandemic was not compromised by lack of funds or delays in financial approval. The guidance allocated a specific Covid-19 cost centre to record the costs and identified specific budget approvers against that cost centre. This remained in place throughout Covid-19 and was only superseded by a further updated guidance note the following year (October 2021) when additional funding to support NHS Care System pressures associated with impact of Covid-19 was received by the Service. This was a substantial new investment for the SAS to a total of £20m over five years. This funding was in addition to the Covid-19 costs that were being monitored and the updated guidance note ensured the costs associated with the new funding were also monitored. The funding specifically targeted improved response times, alleviated pressures, and improved staff wellbeing. Both guidance notes were underpinned by the existing internal control framework, as noted in the response above.

62. For each year of the pandemic, additional Covid-19 funding was received from Scottish Government as follows:

Financial Year	Description of Funding
March 2020	Additional Covid-19 funding of £1.7m was confirmed. This included costs associated with PPE and additional staff.
April 2020-March 2021	Additional £18.5m of Covid-19 funding received in year to cover additional pay and overtime for staff, to support the training of students and additional staff for the Covid-19 response at the NHS Louisa Jordan Hospital in Glasgow, additional air ambulance costs as well as additional costs for remobilisation and cleaning/PPE supplies. A further £14.3m of funding was provided to support the setup of Mobile Testing Units.
April 2021-March 2022	Additional £16.2m of Covid-19 costs including pay costs, PPE, air ambulance, remobilisation and in this year £2m of efficiency savings underachievement due to Covid-19 pressures, and additional £33.8m for Mobile Testing Units.
April 2022 – June 2022	Total Covid-19 costs of £3.5m for the first three months of the year. Mobile Testing Units costs to end of June was £7.1m

63. The Service requested additional funding during financial years 2020-21, 2021-22 and 2022-23. The funding requests were submitted to Scottish Government within the guidance defined by Scottish Government and also included within the Service financial plans for these years and annual delivery plans. We received the total funding required for Covid-19 in financial years 2020-21 and 2021-22.

Pandemic Preparedness and Initial Pandemic Planning

64. Prior to the start of the pandemic, a well-established component of SAS's core business continuity arrangements was the SAS Generic Capacity Management Contingency Plan and Resource Escalatory Action Plan (REAP) which provided a framework for the SAS to manage the consequences of instances when demand exceeded the ability of the Service to meet it. A number of things that hindered the Service's ability to respond to patients became more prominent due to Covid-19; particularly the impact on increased hospital turnaround times and the increase in staff absence resulting in decreased ambulance availability. This in turn resulted in a large number of incidents waiting longer than usual for an ambulance response which posed a significant clinical risk to patients, many of whom could deteriorate due to ambulance delays. Recognising the additional and sustained impact of the pandemic, the

Service's existing measures were quickly complimented by the development of a Pandemic Escalation Plan and then a National Escalation Plan, which was first introduced in November 2020 to provide a framework that supported decision making whilst protecting patients and maintaining the Service's response during times of elevated pressure. The framework assessed clinical risk to patients in real time by looking at the number of emergencies waiting in any geographic region and assessing the risk of deterioration of patients due to decreased ambulance availability. The escalation levels could increase the number of patients that received a telephone consultation by an Advanced Practitioner. If appropriate, at the point of a non-clinical triage of a 999 call, it also increased the number of patients that were signposted to their GP, Out of Hours GP, NHS24 or NHS Inform. The process was managed by a Clinical Stack Coordinator (a Senior Clinical Support Manager with oversight of waiting patients and responsible for mitigating the risk within the outstanding unallocated incident stack) based in the Ambulance Control Centres, along with the Control Centre Duty Manager (control centre professional and senior manager) and overseen by the Strategic Operations Manager (a 24/7 senior manager responsible for oversight of all operations across Scotland).

65. On 1 March 2020 the SAS had in place the Pandemic Outbreak Plan V3.0 (Aug 2016). Version 3 of the plan was created following the Scottish Government's Silver Swan exercising programme and subsequent Silver Swan Overall Exercise Report issued in April 2016. In July 2019, the Pandemic Influenza Guidance for Health and Social Care Draft for Consultation was issued. This, however, was not finalised or published. Given the emerging situation which led to the Covid-19 pandemic, the decision was made by the SAS to refresh the Pandemic Outbreak Plan in place at the time, V3.0. As a result, the Pandemic Outbreak Preparedness and Management Plan V4.0 (Draft) was created and presented to the SAS Resilience Committee in June 2020. The decision was made to have the Plan remain as a draft until the Pandemic Influenza Guidance for Health and Social Care was finalised and published. The plan remains as V4.0 (draft) and will be updated pending final guidance from Scottish Government. All versions of the SAS plan are designed to work in conjunction with the Service REAP which is reviewed and tested annually.

66. To compliment the above plans, existing policies were in place to support the transfer of small numbers of patients with High Consequences Infectious Diseases (HCID) but recognising the scale of the pandemic, early work was undertaken with key transport providers such as Caledonian MacBrayne (CalMac), to develop and introduce

protocols for the transfer of patients from islands who were higher acuity confirmed cases of Covid-19. Early discussions were also progressed with partner agencies, including the development of a Memorandum of Understanding between Scottish Fire & Rescue Service (SFRS) and the SAS for assistance with the transportation of patients during the pandemic and this was signed off by the respective Chief Officers in May 2020. Concurrent discussions commenced with the Military regarding potential requests for Military Assistance to Civil Authorities (MACA), in respect of both air transportation and provision of driving support.

67. With respect to air transport, at the beginning of the pandemic, infection control concerns regarding the movement of Covid-19 patients in the SAS King Air (fixed wing aircraft) were identified. As a result, in collaboration with Scottish Government and Gama Aviation (the incumbent air ambulance provider), a contract was implemented with Logan Air to utilise one of their aircraft for 16 hours per day to support the transfer of Covid-19 patients using their Saab340 aircraft. This agreement started in May 2020 and concluded in June 2021.

Initial Impact on Resources

68. At the outset and throughout the pandemic, weekly demand and capacity forecasting models were produced for both our 999 and Patient Transport Services. The 999 models were used to forecast expected scenarios for demand for Covid-19 and non-Covid-19 related incidents and staffing capacity taking account of forecast absence levels. The models were used to identify any projected gaps in staffing levels and areas of priority which in turn, were used to inform where to deploy the use of additional overtime, bank and supplementary staffing such as the Military.

69. Due to the national lockdowns and the requirement for staff and the public to isolate, the number of front-line staff hours in the SAS emergency and urgent care services remained steady throughout the initial period of the pandemic. This was due to a reduction in sickness absence which largely mitigated the impact of Covid-19 related absence. In early summer 2021 coverage of shifts became more challenging due to the compounding effect of a return to pre-pandemic sickness absence levels while Covid-19 absence remained. This coincided with an increase in demand and wider system pressures across Scotland, for example increased hospital turnaround times. Throughout Covid the Service used various levels of escalation to ensure that despite

high levels of staff absence, high levels of demand, and increasing wider system pressures, it prioritised the resources it could generate to the sickest patients. And so, although it would be correct to say that there were no occasions where there were insufficient staff to meet demands on the Service that was only due to the levels of escalation that were put in place to prioritise demand and the additional support received from the Military, Scottish Fire and Rescue, and British Red Cross. It was also not without risk to lower acuity patients.

70. The Patient Transport Service models for forecasting demand and capacity were used in a similar manner. In some cases, the reduction in demand on Patient Transport Services enabled the release of staff to support delivery of 999 services.

71. Throughout these periods of increased pressure, staff would be allocated to the areas of most need or priority. Each region of the SAS (West, East and North) developed a mobilisation plan based on their anticipated staff abstractions. Within the mobilisation plan, they identified any requirements for mutual aid including the potential for Military support. Following the identification of expected gaps in provision, local management teams, through established management cells and the resource planning teams, would communicate available shifts with existing staff and bank staff. Where available, the Military, SFRS and occasionally British Red Cross were also allocated shifts. For Military and SFRS, training was put in place as part of an induction package. This training included a driving assessment along with basic life support and manual handling, so that they could support the clinician in the vehicle. The training also included face fit testing, doffing and donning PPE, and Infection, Protection and Control (IPC). There was no additional training delivered by the Service for British Red Cross, but we did support them with PPE.

72. The Strategic Cell was the ultimate repository for the gathering of this information which was collated and fed into the Executive Leadership Team. Whist there was engagement on a UK basis with other ambulance services through the National Ambulance Resilience Unit it was evident there was limited capacity for the provision of mutual aid should this be required, due to the universal impact on service capacity created by the pandemic.

73. One area which offered a potential pool of additional resource was private ambulance providers. Recognising the potential impact on service demand, the SAS undertook a

voluntary review of private providers that indicated they would be willing to support the NHS if required. This review was conducted by a senior manager and primarily based upon the Care Quality Commission (CQC) Standards as laid down in England.

74. However, Scotland does not have a legislative framework in place for the regulation of private ambulance providers. Consequently, there is no formal agreed governance mechanism by which NHS Scotland Health Boards, the SAS included, can be assured of the standards that private ambulance providers meet. This includes not only clinical standards, but also matters relating to financial probity, vetting and clearance of their employees.

75. The SAS therefore does not ordinarily contract the services of private providers. There were limited circumstances in which third sector organisations including the British Red Cross, His Majesty's Coast Guard (HMCG) and Mountain Rescue were asked to provide support during the pandemic, with Memoranda of Understanding compiled between the relevant organisations. These were the only additional clinical providers engaged and they were only engaged in limited circumstances.

76. Arrangements for the mobilisation of partner and third sector resources were the responsibility of regional cells based on the predicted staff abstraction rates and the epidemiological modelling of the potential impact of the virus on service demand.

77. One tool which supported the Services ability to safeguard its staff and its patients was testing. On 1 March 2020, there were no policies or plans in place which outlined how the Service would maintain adequate levels of Covid-19 tests for staff. No routine testing was in place. SAS managers were able to access Occupational Health Services to refer their staff should they require any health-related testing to take place, but this did not have capacity to deal with large numbers of staff.

78. At the time where the Covid-19 PCR tests were available for eligible front line key workers, all staff who were symptomatic or were in contact with a symptomatic person were able to quickly access a PCR test through the Scottish Government's National PCR testing arrangements.

79. SAS were in receipt of adequate level of lateral flow tests for staff once they became available. SAS acquired Lateral Flow tests in bulk in December 2020 via the National

Services Scotland National Distribution Centre and distribution of these kits across the services commenced on 26 December 2020. All test kits were signed for by staff and these details were retained on a central database. The details of the stock in various stations were fed into our Logistics Cell. Staff were required to submit test results via an NHS Scotland website.

Responding to Covid-19

Prioritising Patients

80. When patients call 999 for an ambulance in Scotland, calls are triaged by non-clinical call handlers using the Medical Priority Dispatch System (MPDS) supplied by the International Academy of Emergency Dispatch (IAED) and used by ambulance services across the world.

81. As we received new or updated intelligence from colleagues from infection prevention and control (via Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) and national medical and clinical guidance (NASMED / Scottish Government), we implemented several changes to the system based on this emerging evidence and information about the disease and how it affected both our patients and staff. Although there were additional questions asked of a 999-caller relating to symptoms and travel, these were introduced to gain more information about patients and to protect responders, and they did not alter the call prioritisation in any way.

82. There were five fundamental changes to 999 call prioritisations in response to the Covid-19 pandemic. Although these five changes were brought in as part of the immediate response to Covid19, these remained in place throughout the pandemic and a number of these still exist today.

Introduction of the Pandemic Escalation Plan (March 2020)

83. When 999 calls are taken through our telephone triage system, all calls are coded with a dispatch code. There are over 2,500 dispatch codes which make up the Dispatch Code Reference (DCR) table. This table underpins our clinical response model.

84. In response to the unprecedented demand Covid-19 brought, the Pandemic Escalation Plan allowed the SAS to implement five DCR tables which enabled us to increase or

limit the number of patients who received an ambulance based on the level of demand we were facing and their level of acuity. Low acuity patients are patients which have an absence of immediately life threatening symptoms and a very low likelihood of requiring life-saving interventions (categorised as yellow calls as per paragraph 104 below). These low acuity patients where appropriate were referred to GPs, out of hours GP, NHS 24 and NHS Inform. This was introduced in March 2020. The full development proposal for the Clinical Response Model is shown in Exhibit PB/01 [INQ000303178] and the Pandemic Escalation Plan is shown in Exhibit PB/02 [INQ000303179].

85. A full summary of the triggers and levels are included in this document. This allowed the SAS to escalate based on live demand and the number of waiting incidents which required an ambulance, whilst protecting our sickest patients. As detailed within the document, at lower levels of escalation our patients least likely to deteriorate or have no Immediately Life Threatening symptoms were given self-care advice or signposted towards their GP, out of hours GP, NHS24 and NHS Inform, and as the escalation levels rose, the number of patients who entered these alternative pathways also increased. This allowed us to ensure that we had the resources available to respond as quickly as possible to our highest acuity patients who may only have had minutes to live.

Introduction of Protocol 36 – Medical Priority Dispatch System (MPDS) Pandemic Protocol (April 2020)

86. The MPDS pandemic protocol was introduced to better identify any potential Covid-19 patients, the protocol (also known as Protocol 36) followed the standard MPDS methodology of structured questions, identifying priority symptoms and assessing the level of clinical risk. All patients with breathing problems, chest pain, or flu like illness were assessed under this protocol. This protocol was introduced to call handlers in April 2020. The Summary Paper regarding the protocol is shown in Exhibit PB/03 [INQ000303180], and the two documents which were issued to staff are the ACC Guidelines [Exhibit PB/04 INQ000303181] and the Frequently Asked Questions [Exhibit PB/05 INQ000303182].

Introduction of Remote Consultation (May 2020)

87. In May 2020, the SAS introduced Remote Consultation for our Advanced Practitioner (AP) cohort of clinicians. This enabled the SAS, through its APs, to review any patients who presented as non-life threatening and where the patient presentation matched the

scope of practice of an AP. For example, incidents such as abdominal pain, back pain and difficulty breathing come under the scope of practice of an AP and as such we funnelled these types of incidents towards this group of staff. Using dispatch codes, a set of 999 calls were identified where an ambulance would not be immediately dispatched. Instead, a SAS AP undertook virtual, remote telephone or video consultation with the patient. Remote Consultation was introduced for three main reasons:

- Safely manage patients, who may not have required an ambulance, into another care pathway or give self-care advice protecting vital ambulance and Emergency Department capacity for our sickest patients.
- Identify those patients who may be sicker than initially triaged by call handlers and upgrade the response level to those individual patients.
- Limit the exposure of our front-line crews and ensure ambulances were only sent to those patients who needed it.

88. Remote consultation was introduced gradually in line with our workforce and call demand. The identification of suitable patients was managed through the Pandemic Escalation Plan (as mentioned above). A review was undertaken in April 2021 where APs had reviewed over 87,000 patients and undertaken a clinical consultation in over 70,000 patients. This had resulted in over 26,600 saved ambulance journeys. For the relevant period, the Service recorded a total of 1,839,928 incidents. Of these, 140,063 incidents (7.6%) were allocated to APs. Of the incidents allocated to APs, in 55,097 (39.3%) incidents a decision was made not to send an ambulance.

Introduction of tiered call handling (May 2020)

89. Due to the need to increase available workforce within call handling, the Ambulance Control Centres (ACCs) implemented a two-tier skill set within their Accident and Emergency workforce. Whereas before a single call handler would handle all types of calls, the two-tier skill mix split the calls into different groups:

- The first, is the Health Care Professional (HCP) group. This groups receives non-public emergency calls made by healthcare professionals and all non-emergency calls.
- The second is the 999 group. This group receives the public 999 calls, with the capability to also manage the HCP calls.

90. Call handlers on the HCP group had a shorter training period, which meant the workforce could be scaled up more quickly than it had been previously. This was a four week training session; two weeks based in a classroom and two weeks in a buddy setting. This can be compared to the 999 call handlers that undergo a 10 week training course: four weeks in the classroom and six weeks buddying. None of our call handlers are required to have clinical expertise or experience as they all follow a strictly controlled and internationally agreed protocol when handling a call.

91. Priority telephone routing was put in place to ensure all non-public emergency and non-emergency calls were presented to a call handler within the HCP group first, presenting to that call handler for 10 seconds. If the call was not answered within 10 seconds, the call would be sent to the next available call handler regardless of which group they were in.

92. This model was built using previous call types and volumes to understand how many staff we would need to answer these specific HCP and non 999 calls. We then looked at the day of week and time of day that SAS received these calls to understand where these call handlers needed to be rostered. The implementation of this model created capacity within 999 call handling to answer more calls.

93. The ACCs achieved a call answer service level of 85.34% for public 999 calls answered within 10 seconds during 2020, which is below the target of 90% but maintained a safe level of service for patients and callers accessing emergency healthcare through the 999 system. From April until December 2021, the SAS saw a large increase in 999 call demand as well as unplanned spikes in non-public emergency and non-emergency call demand. The sharp increases in demand combined with Covid-19 related absence and increases in duplicate calls due to delays in ambulance response, affected the service level performance for 999 calls more than the previous year. Following the sharp upturn in call volume from May 2021 onwards, the demand forecast provided by the SAS forecasting team was reviewed and an increase in predicted calls added.

94. Following this, an additional business case to increase the number of Call Handlers in ACC was approved and a revised recruitment strategy to support the increase in staffing was put in place. Where unplanned shrinkage (such as short notice absence)

reduced the number of people on shift, the ACCs utilised a Call Escalation Plan (CEP), introduced in November 2020, to reduce the handling time of the calls, which in turn increased the availability of call handlers to take more calls. Whilst this is effective in operation, it increases the utilisation rate of the call handlers and sustained periods operating like this results in increased absence.

95. Whilst the target of 90% of public 999 calls answered in 10 seconds was not achieved until November 2022 the call escalation plan, which decreased the time to process a 999 call, meant that SAS answered a significantly larger number of calls than the call handler numbers would have normally enabled them to do. Without implementation of our call escalation plan and the hard work and selfless commitment of our ACC staff, our call response times would have been significantly worse based on the size of our workforce. This came with considerable pressure on the call handlers that worked during this period of time. In January 2021 the average time to answer a 999 call was just over 15 seconds, this increased to nearly 25 seconds in February and March and remained at over 20 seconds for most of the late spring and summer months.

96. In August 2021, as a result of the business case, the ACCs increased in establishment to 164 WTE Call Handlers. Combined with the escalation procedures described and changes to how call flows were managed, the ACCs achieved an average 999 call answer of under 15 seconds for the first time in 2021. This continued to improve and in November 2021 the ACC achieved an average 999-call answer time of under 10 seconds. This has been maintained since

Introduction of telephony automation for suitable patients (April 2020)

97. Covid-19 Telephony Automation: Arcus Global are an IT technology company that specialise in the use of Voice over Internet Protocol (VoIP) cloud-based telephony systems. Arcus approached the SAS to offer support as part of the global response to Covid-19. In partnership with the SAS, Arcus developed an automated algorithmic questionnaire for patients who required advice specifically around Covid-19 symptoms rather than an immediate ambulance response or 999 triage. BT were able to connect patients into this automatic assessment direct from a 999 call and, at the end of the questionnaire, if required, patients were then connected to SAS.

98. Implementation of this process did not affect the prioritisation of patients who contacted SAS directly. Of the 800 calls that were progressed through the algorithm only 47 callers did not progress to a further triage by a SAS call handler. Of the 753 calls

progressed to further assessment, 358 went to an HCP call handler and 395 to a 999 call handler. The end of call care and advice given to non-critical patients was also automated and over an 11 week period over 35,000 calls were dealt with this way. This further shortened the average amount of time to handle calls and created room for more 999 calls to be taken, contributing to an increase in performance during this time.

Service Delivery Performance

99. In this section, I would like to detail our demand and response times and targets for the relevant period. Our response time targets are agreed with the SAS Board and the Scottish Government through the annual delivery plan and annual review process.

Demand - Pre Covid-19

100. For the week beginning 24 February 2020:

- 896 accident and emergency ambulances and patient transport service vehicles were available across the SAS.
- 12,106 999 calls were received in a week.
- 999 call pick up within 10 seconds was 73.1% against a target of 90%.
- There were 10,284 calls to our Patient Transport Service.

Demand – During Covid-19

101. Unscheduled and scheduled care call charts are detailed in exhibit PB/06 INQ000303183. and show the patterns of calls in relation to the lockdown dates. Similar patterns exist for the number of incidents/journeys.

102. Unscheduled care: a drop in demand for unscheduled care was experienced as the first lockdown commenced. This remained unseasonably low throughout the remainder of 2020 and into the first quarter of 2021 with the most significant demand reduction seen in April to June 2020. As restrictions began to ease in summer 2021 unscheduled care demand increased to above expected pre-Covid-19 seasonal levels. This remained until the end of 2021 where demand returned to expected seasonal levels.

103. Scheduled care: the number of scheduled care (Patient Transport Service) journeys dropped significantly as the pandemic began. This was due to the suspension of planned health care which resulted in a reduced demand for transportation to

healthcare facilities. The number of journeys carried out increased from the lowest level in April 2020 to October 2020 and has remained fairly stable since then.

Response Times

104. The SAS implemented the Clinical Response Model (CRM) for Emergency 999 calls in November 2016. The CRM aims to save more lives by more accurately identifying patients with immediately life-threatening conditions, such as cardiac arrest; and to safely and effectively send the right type of resource first time to all patients based on their clinical need. The model institutes a colour-coded system, which categorises 999 calls in terms of clinical need. Cases are coded purple, red, amber, yellow and green. In less urgent cases, call handlers may spend more time with patients to better understand their health needs and ensure they send the most appropriate resource for their condition and clinical need. The process is also designed to identify instances when an ambulance is not needed and instead the patient can be referred to an alternative pathway such as GPs, Out of hours GPs, NHS24, NHS Inform or outpatient services. All calls are triaged into the following categories.

Purple: Our most critically ill patients. This is where a patient is identified as having a 10% or more chance of having a cardiac arrest. The actual cardiac arrest rate across this category is approximately 53%.
Red: Our next most serious category where a patient is identified as having a likelihood of cardiac arrest between 1% and 9.9% or having a need for resuscitation interventions such as airway management above 2%. Currently the cardiac arrest rate in this category is approximately 1.5%.
Amber: where a patient is likely to need diagnosis and transport to hospital or specialist care. The cardiac arrest rates for all of these codes is less than 0.5%.
Yellow: a patient who has a need for care but has a very low likelihood of requiring life-saving interventions. For example, patients who have tripped or fallen but not sustained any serious injury.
Green: whilst green is not an acuity within the CRM, it allows SAS to funnel the call for clinical interaction prior to being visible to the dispatcher.

105. There are response time standards for each of these categories of calls. Exhibit PB/07 [INQ000303184] shows the response time standards for 999 and Patient Transport Services as well as the response times for incidents attended for financial years 2019-20, 2020-21, 2021-22, 2022-23. The response times are broken down into call colours, purple, red, amber and yellow. In 2019-20, the aims were set against the median (mid-range) and 90th percentile (where 90% of the timings are less than or equal to this value) for each of these colours.

Pre-Covid-19

106. In the week commencing 24 February 2020 the response time standard for the purple 90th percentile was met, no others reached the standard. It may be worth noting that response time standards are set annually, and it is expected that there will be an element of seasonality that impact on the ability to meet these standards based on other system pressures (e.g. winter pressures).

107. The SAS carried out 10,196 patient transports in the week commencing 24 February 2020 and the performance against targets were:

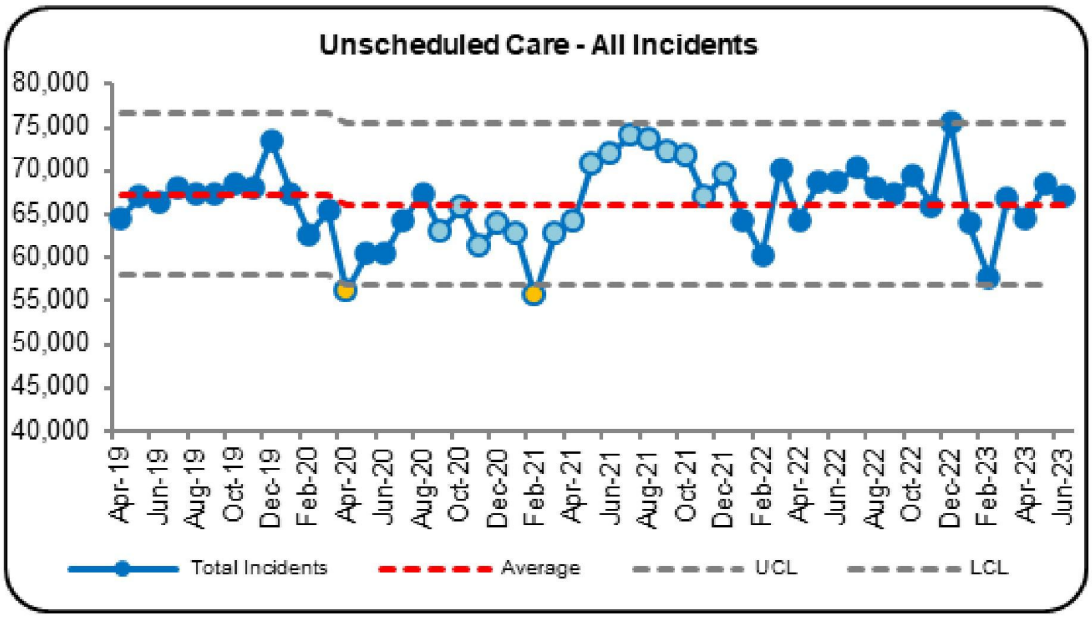
Punctuality for inward journey:	73.4% (aim: 75%)
Punctuality for pickup after appointment:	83.5% (aim: 80%)
Journeys cancelled by SAS due to no resource:	0.7% (aim: <0.5%)

Covid-19

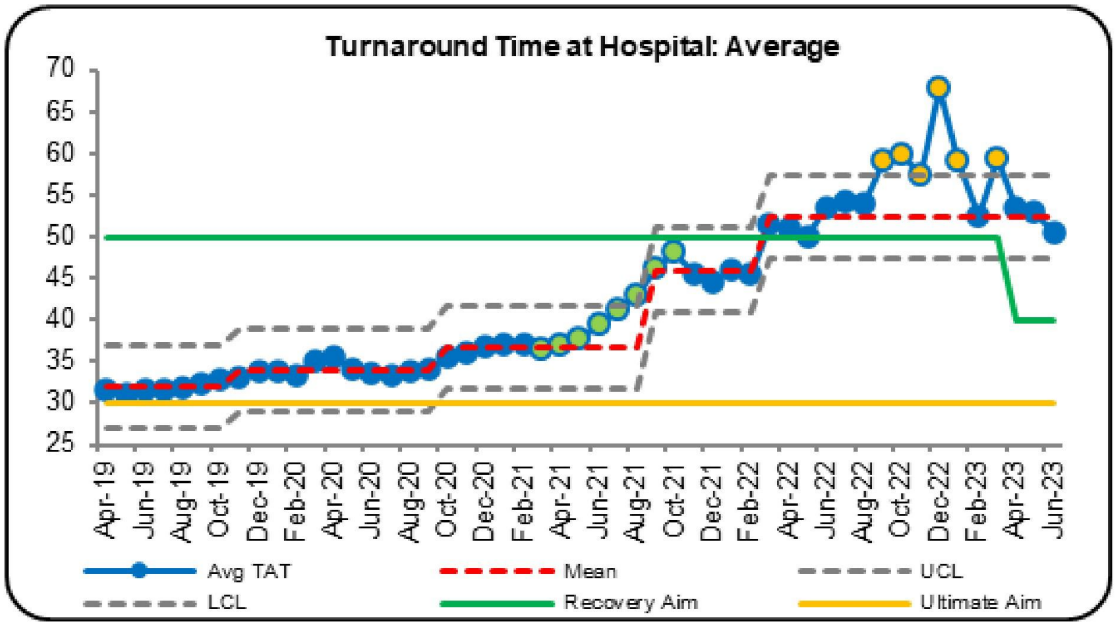
108. During the early part of the pandemic, response time standards were met. This was due to a combination of both a reduction in demand seen by both the SAS and hospital Emergency Departments in the initial lockdown period, and the maintenance of the same level of crew hours as seen pre-pandemic. Please see below the table showing the response time standards and the actual response times for the period of March 2020 and August 2020. Not all standards were met in this period, and those standards that were not met were mostly associated with the Immediately Life Threatening (ILT) patients (purple and red calls).

Unscheduled Care	2020/21 Aim	2021/22 Aim	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20
Purple Median	≤00:06:20	≤00:06:20	0:07:01	0:06:55	0:06:51	0:07:01	0:06:54	0:07:02
Purple in 8 mins	67.0%	67.0%	58.9%	59.7%	60.7%	60.0%	60.0%	58.3%
Purple in 15 mins	90.0%	90.0%	89.3%	92.8%	92.1%	89.7%	89.3%	89.3%
Red Median	≤00:07:30	≤00:07:30	0:08:31	0:08:09	0:07:45	0:07:46	0:08:06	0:08:18
Red in 18 mins	90.0%	90.0%	89.8%	91.7%	93.0%	92.5%	90.7%	89.9%
Amber Median	≤00:15:00	≤00:15:00	0:15:22	0:13:57	0:13:09	0:13:28	0:14:06	0:15:01
Amber in 30 mins	90.0%	90.0%	84.8%	89.9%	92.4%	91.7%	90.1%	87.1%
Yellow Median	≤00:20:00	≤00:20:00	0:26:07	0:19:15	0:17:03	0:18:39	0:20:13	0:22:59
Yellow in 60 mins	86.5%	86.5%	74.8%	87.1%	91.7%	88.5%	86.4%	81.6%

109. As lockdown eased demand picked up across the SAS, and the wider healthcare system's ability to maintain flow became more challenging. A considerable factor in the timely response to patients is the extended waiting times at hospital which our ambulances crews and patients have experienced. The turnaround time at hospital has increased significantly since before the pandemic. This increase was first seen in spring 2021 and continued to steadily increase to its peak in December 2022. The average turnaround time remains significantly higher than previously experienced. When SAS crews are delayed at hospital waiting to handover patients it has an impact on the SAS's availability to respond to any waiting incidents and therefore increases the response times. Demand rose significantly from May 2021 and continued to be above the mean until December 2021 (see chart below).



110. Please see the chart below which shows the average turnaround time pre-pandemic and throughout the period mentioned up to June 2023 which shows the sustained increase.



111. Our ongoing monitoring of demand throughout the pandemic has showed that there was a fluctuation (increase/decrease) in demand which coincided with new waves of Covid-19 and with the easing of restrictions, but we cannot quantify if this had a negative impact on patient's willingness to seek care.

112. There has also been a significant shift in the acuity levels of patients presenting to the SAS. A higher percentage of our patients are presenting with signs and symptoms that require an immediate response. Prior to Covid-19, the immediately life-threatening purple and red calls accounted for around 12% of our overall demand. In the year from April 2020 to March 2021 this figure was 14.4% whilst from April 2021 to March 2022 this figure increased to 19.3%

113. For 2022-23 we set recovery aims which are outlined in the table below. These are based on modelling throughout the financial year taking account of predicted demand, capacity and seasonality including the forecast impact of Covid-19. These recovery aims are being revisited on an annual basis and will be set for each financial year.

Unscheduled Care	2022-23
999 Call Pickup in 10 Seconds	90.0%
Purple Median	≤00:07:05
Purple 95th centile	≤00:20:30
Red Median	≤00:08:45
Red 95th centile	≤00:30:30
Amber Median	≤00:18:30
Amber 95th centile	≤01:31:00
Yellow Median	≤00:36:30
Yellow 95th centile	≤04:18:00
1 hour HCP Scheduled Incidents in Time	40.0%
2 hour HCP Scheduled Incidents in Time	65.0%
4 hour HCP Scheduled Incidents in Time	75.0%

Clinical Decision Making

114. All SAS clinicians have access to the full Joint Royal College Ambulance Liaison Committee (JRCALC) clinical practice guidelines. This is provided via a mobile application which is the single portal for all written approved clinical guidance.

115. In addition to the JRCALC clinical practice guidelines, the SAS introduced a Clinical Decision-Making Framework in 2017 and it was fundamentally revised in early 2020 as part of the scheduled review of our policies and not as a direct consequence of Covid-19. The revisions brought the document up to date with best and current clinical practice. This framework supports front line clinicians with decision making and continues to be the key guidance document that SAS clinicians refer to. This framework contains a range of guiding principles and was developed to assist ambulance clinicians to make safe, effective, person centred decisions with patients and carers, and is aligned to the principles of Realistic Medicine. This framework supports clinicians in their decisions about the likely pathway for each patient, be that stay in home, refer to covid hub or convey to hospital.

116. During Covid-19, additional clinical guidance was provided:

Guidance Name	COPD/ASTHMA Guidance
Brief Description	For adults and children one year old and over who have a prior diagnosis of asthma/COPD and who are prescribed a salbutamol metered dose inhaler (MDI). The content of this guidance was issued to all SAS staff via our agreed communication channels.
Origin	Guidance was issued from the National Association of Medical Directors (NASMED) (which is a sub-group of the Association of Ambulance Chief Executives)

Guidance Name	'SAS assessment of patients in the community setting during C19'
Brief Description	Our focus based on clinically vulnerable groups as highlighted through the pandemic. As the evidence emerged, more categories were added to both patients at risk of deterioration and red flags. There were several iterations of this guidance which was developed to support on scene clinical decision making. It was in keeping with the principles of realistic medicine and shared decision making between patients and clinicians
Origin	This is SAS clinical guidance which reflected wider emerging national evidence/guidance from various organisations e.g.: Health Protection Scotland/Public Health Scotland, Chief Medical Officer, National Ambulance Resilience Unit.
Exhibit Number	PB/08 [INQ000328739] The current guideline is attached. For all changes made to this document, please refer to exhibit PB/11 [INQ000303185]

Guidance Name	'Managing symptoms (including end of life) in the Community Setting'
Brief Description	This guidance is for ambulance clinicians to support patients that present with Covid-19 symptoms who are not being conveyed to hospital. This guidance is supplementary to the existing guidance within JRCALC and Scottish Ambulance Service Covid-19 Clinical Guideline.
Origin	AACE/NASMeD/SAS

Guidance Name	'SBAR[1] Advanced Practitioners in Critical Care (APCC) support to Clinical Cell and APCC support to the tactical Cell during Covid-19'
Brief Description	Members of the APCC team were located (24/7) in the National Tactical Cell, to monitor and support all elements of the purple response chain in respect of providing real time information and support to clinicians responding to Purple coded calls, this can include support to resuscitation practice and decision making where required.
Origin	The SAS
Exhibit Number	PB/09 [INQ000328740]

Guidance Name	'National Clinical Bulletin 029/2020 Critical Care Advice Available from Ambulance Control Centres'
Brief Description	As part of a Critical Care Desk (CCD) trial within the Ambulance Control Centre - the Advanced Practitioners in Critical Care (APCC) were available to assist ambulance clinicians with clinical decision making for critically ill patients (medical or trauma).
Origin	The SAS
Exhibit Number	PB/10 [INQ000328738]

117. Exhibit PB/11 [INQ000303185] shows a chronological table which sets out all key advice, guidance and policies and/or plans which were used when Covid-19 and non-Covid-19 patients were assessed and prioritised for 999 emergency ambulance responses and conveyance to hospital.

118. I cannot comment on the advice and guidance provided to patients who rang 111 and who were suspected to have contracted Covid-19, since 111 services in Scotland are provided for by NHS 24.

119. I want to cover briefly, the subject of Do Not Attempt Cardiopulmonary Resuscitation' (DNACPR) notices. Our clinicians are not part of the healthcare team supporting a patient who would discuss with them any advanced medical directive, such as individual DNACPR notices. These discussions are normally held between the patient and their GP, consultant, or nurse. Our role within the Service is to follow any notices

[1] SBAR is a format for a written or verbal brief. The name SBAR is taken from the main paragraphs of the brief which outline Situation, Background, Assessment, Recommendations

which our patients have previously agreed, make patients comfortable but not to undertake CPR if they have chosen against this course of action.

120. It should be noted that there was no change made to practice from NHS Scotland's DNACPR Policy during any stage of the pandemic in reference to the Service. Therefore, SAS clinicians did not issue DNACPR orders. There were no concerns noted by the SAS regarding patients with DNA CPR notices in place.

Collaboration and communication with other healthcare organisations

121. In addition to local engagement between regional management teams at strategic, tactical, and operational levels, there were daily conference calls that drew together all of the Health Boards across Scotland. These provided an update on the progress of the pandemic, national modelling, local outbreaks, and key issues including public health messaging and response measures such as mortuary capacity etc. The SAS strategic cell joined these calls on a daily basis.

122. During the pandemic there were no formal agreements between SAS and the rest of the UK ambulance services that were specific to Covid-19. It was apparent through existing structures that all services were under significant pressure due to the cumulative impact of staff abstractions and increased demands. Conference calls were chaired by the National Ambulance Resilience Unit to consider the position of services and their ability to address both their own demand, and to support neighbouring services. It was established during these meetings that services were not in a position to provide mutual aid in terms of front line crews and therefore would need to be largely self-reliant.

123. One exception was in call handling where existing agreements for mutual aid were invoked to mitigate the impact of Covid-19. On the 22 January 2021 the Scottish Ambulance Service experienced a loss of call taking functionality due to a Covid-19 outbreak in the Paisley site of the West ACC. As a result of this the Service implemented the UK Partial Loss of Call Handling Plan in which other UK services supported SAS by taking calls. The Plan had been used twice previously for other services within the UK which the SAS had fully supported. Mutual Aid was stopped and support from other UK ambulance services was stood down on 31 January 2021

124. From business as usual to incident response the UK Ambulance Services have various groups set up which share best practice and if required have the ability to conduct mutual aid.

- Emergency preparedness, Resilience & Response Group - UK EPRRG
- National Operations Group - NARU NOG
- National Directors of Operations Group - NDOG
- National Association of Medical Directors Group - NASMED

125. Several of these groups have various subgroups which are allocated tasks and deliver collective solutions. During Covid-19 all these groups worked closely together to provide guidance and support to each other and to ensure that best practice was followed.

126. In terms of the impact upon at-risk and vulnerable groups, all SAS polices and guidance, including those introduced during Covid-19, are subject to an Equality Impact Assessment to ensure that they meet the requirements of the Equality Act 2010.

127. In late 2022, a specific question was added to the guideline's governance process "Has the potential for, or actual, health inequalities impact been considered in both the development and implementation of this guideline?" The decision to make this change was not connected to Covid-19. Prior to this, consideration was assumed rather than explicitly considered within the process. For example, as the evidence emerged, we added additional groups/conditions to the at 'risk of deterioration' and 'red flag' sections. These included for example: the addition of Diabetes. This additional question (health inequalities) was not retrospectively applied to existing approved clinical guidance. Our response to patients is organised through a clinical triage process which is based purely on clinical acuity, although we can prioritise some patients who may be at risk due to the environment they are in, e.g. injured and outside in the snow.

Communicating with Colleagues

128. Throughout Covid-19, prompt and effective communication was key. The service disseminates emergency alerts, policies, plans, or guidance to front line clinicians

through the JRCALC app. This App was at the early stages of implementation in March 2020 with circa 1400 users but reached over 4000 by June 2023. Guidelines are also circulated by email and posted on the Service's intranet. Daily briefing emails were also circulated, and the National Coordination and Control Centre communicated to regional cells. During the intensive periods of time, staff were reminded to continue to use these approved communication routes.

129. From 8 April 2021, the Chief Executive commenced a weekly staff engagement session and invitations for these open sessions were issued to all staff who could use Microsoft Teams to attend. Each session provided a situation report from the Incident Management Team on the daily numbers of confirmed Covid-19 cases, updates on the vaccination programme, encouragement of lateral flow testing by all staff, the numbers of 999 calls the Service was receiving, hospital turnaround times, and the impact on the Service. At key points of the pandemic, there were targeted presentations from key staff on specific topics, for example the vaccinations offered to all. These sessions were recorded so that staff that could not attend the briefs could watch them at their earliest convenience afterwards. The Engagement Sessions were promoted through the weekly Chief Executive's bulletin. These weekly sessions continued throughout all waves of the pandemic.

130. In recognition of the need to reach as many staff as possible, using readily available mediums, 3 videos were produced in March 2020 by the communications team and fronted by a strategic commander. These were posted on the Service's public facing Facebook page and aimed to provide reassurance and thanks to staff throughout the Service.

Staff Resourcing

131. PB/12 [INQ000303186] is the National Published Workforce statistics which shows the number of front-line ambulance staff and Ambulance Control Centre staff as of 1 March 2020. The following table highlights the difference in workforce (whole time equivalent) from the period 1 March 2020 – 30 June 2022 for Unscheduled Care (Accident and Emergency (A&E) in this table) Patient Transport Services, Ambulance Control and Mobile Testing Units. Our A&E workforce increased as a result of Demand & Capacity funding which had been planned before the pandemic whereas all other areas in the table below increased using temporary funding.

	WTE 1 March 2020	WTE 30 June 2022	Workforce WTE Variance
Mobile Testing Unit	0.0	722.5	722.5
PTS	654.8	770.9	116.1
A&E	2727.8	3118.6	390.8
Ambulance Control	451.775	553.81	102.0

132. It should be noted that workforce numbers increased across the relevant period for a number of reasons which included:

- Establishing a Mobile Testing Units
- Establishing Mobile Vaccination Units
- Implementation of additional staffing in line with agreed funding from Scottish Government for our Demand and Capacity Programme - Funding for this was phased in annually from 2019-2020 for 3 years, 148 whole time equivalent (WTE) in year 1, 148 WTE in year 2 and 162 WTE in year 3. Work was carried out throughout this period to increase the number of stations that we operate from, align shift patterns with demand profiles and to increase the number of vehicles to align with these requirements.
- Increasing the number of staff and ambulance resources by 98 WTE to manage low acuity workload and reduce pressures on front line Accident and Emergency workforce.
- Increasing the number of staff within the Ambulance Control Rooms to meet increased demand.

133. To increase further capacity the SAS also:

- Contacted retired staff to request return to work.
- Commissioned the British Red Cross to support our PTS and low acuity responses within A&E.
- Increased support from Scottish Fire & Rescue to support our frontline response to Accident and Emergency patients.
- Increased support from Students, including paramedic students and the wider student cohort.
- Increased support from the Military to support our frontline response to Accident and Emergency patients.
- Had support from colleagues in His Majesty's Coast Guard (HMCG) and Mountain Rescue Teams

134. Covid-19 had a widespread impact on staffing levels across all locations, particularly for staff who were more exposed such as front-line staff and staff within control centres. The impact on absence levels was widespread and an increase in absence was experienced when waves of a new variant emerged and on the easing of restrictions. These often impacted different geographical areas at different times and mitigating actions were taken to increase staffing accordingly to reduce risk. We redeployed internal staff where necessary to deal with localised Covid-19 outbreaks in communities across Scotland, for example increasing testing capacity, or to mitigate both the higher levels of staff abstractions in an area and the increased number of patients to be taken to hospital. We also sought to backfill staff abstraction due to Covid-19 by utilising Bank staff, retired staff, and through support from Scottish Fire and Rescue Service, and the military.

135. To enable effective recording, monitoring, and forecasting of covid absence levels there were a number of new abstraction reasons added to our workforce planning software (GRS). This allowed the SAS to provide detailed reporting to Scottish Government on a daily and weekly basis on all Covid-19 absence and the specific reason, for example, Covid-19 positive, self-isolating (household related), self-isolating (health related) etc. Analysing the correlation between the recorded abstractions and the rates of Covid-19 in the community enabled us to predict staff numbers during ongoing and future waves of Covid-19. The table below provides the percentage of Covid-19 abstractions during the relevant period, it does not include absence for other health reasons:

	Covid-19 Absence Rate		
	2020	**2021**	**2022**
Jan		6.60%	5.80%
Feb		5.00%	4.10%
Mar	5.00%	4.20%	6.20%
Apr	7.60%	3.20%	4.20%
May	5.20%	1.60%	2.60%
Jun	3.70%	2.10%	3.20%
Jul	3.20%	2.60%	
Aug	2.20%	2.40%	
Sep	2.00%	3.30%	
Oct	4.20%	2.60%	
Nov	5.10%	2.20%	
Dec	4.30%	4.20%	

Supporting the health and wellbeing of our staff

136. Throughout the relevant period, the SAS did not encounter any difficulties accessing Covid-19 testing for staff. Staff were able to access either PCR testing through the National PCR Testing arrangements or had access to lateral flow testing kits via their local stations. The PPE cell, which was established at the start of the pandemic, also monitored the testing kit stock level, with stock moved across the country depending on levels and staffing needs. The SAS logistics hub worked well to ensure every ambulance station across Scotland always had adequate levels of testing kits for staff. There were no changes to our access or supplies of tests during the relevant period, nor were there any impact on staffing levels.

137. The Service applied all the Scottish and UK wide government guidance around Covid-19 to ensure that all our staff were supported in the very best way we could as a responsible and caring NHS employer. The Service provided advice, guidance, and practical assistance to our staff in order that staff were fully protected from the Covid-19 pandemic. Work schedules were adjusted for those staff to whom this would apply, i.e. in the main, support staff rather than frontline staff. MS Teams was rolled out very successfully across the Service within a short time frame.

138. This meant that most support staff were asked to work from home and, when in a work premises, staff were required to adhere to the guidance regarding social distancing, personal hygiene, and face coverings. Work schedules and individual workloads were altered and re-prioritised as necessary to ensure the Service could continue to respond to its daily patient challenges. Travel was kept to an absolute minimum so that the need to visit individual locations was significantly reduced therefore preventing contamination and virus spread. MS Teams became the accepted forum for meeting with other staff and this has continued. Stations where clinical staff were working were effectively closed to everyone else to ensure no cross-infection amongst staff and with the public.

139. Childcare provision for our staff was a particularly challenging situation with the national and local disruption to nursery and education provision. We were rather limited in what we could offer staff, but we tried to remain as flexible as we could to accommodate individual staff needs. Council provided childcare for front line workers was generally available for a short working day during weekdays (0900 to 1500 for

example). This did not support the extended hours that our staff were working to maintain service delivery to our patients – but it helped. Our front-line clinical staff were clearly exposed to a very high risk of infection with the number of Covid-19 positive patients they were seeing. We therefore provided staff with every item of PPE that was available including full protection face masks, respirator hoods, additional protective uniform and very detailed infection control protocols on how to interact and treat patients with Covid-19 symptoms.

140. Supporting our staff's welfare was a huge driver for us and we had a wide range of wellbeing initiatives in place which included provision of welfare vehicles at many hospital sites, providing refreshments and food for clinical staff who were delayed at hospitals, and signposting staff with emotional and mental health issues caused by the pandemic to specialist services. Regular communications were in place to highlight changes in Government legislation as well as infection control protection guidance and general advice as to how to protect staff when interacting within their own community as well as at work. Regular management guidance was produced to assist all Service managers to interact safely with staff and take all necessary precautions to reduce infection.

141. In addition to the measures above, the SAS took the decision to fully extract Union Convenors from front-line working which allowed them dedicated time to attend meetings to represent and support their members and wider staff teams. We have three Trade Union Convenors representing the three recognised trade unions, GMB, UNISON and UNITE. They are normally allocated 80% facility time to participate in discussions with the SAS on all workforce issues. During Covid-19, it was agreed to increase this facility time to 100% to enable them to be fully focused on the pandemic and to support the Service and staff with often challenging workforce matters. As an example, Convenors were invited to attend a weekly 'Key Topic' meeting with senior service managers to discuss and address issues and concerns as they arose.

142. Guidance was provided by Scottish Government to the Service on 4 September 2020 in regard to vulnerable healthcare workers and to staff from some ethnic backgrounds. This guidance was adopted in its totality by the SAS. For staff in specific ethnic groups, we undertook a focused risk assessment as it was generally acknowledged that staff from some ethnic backgrounds were more susceptible to Covid-19. These additional risk assessments were based on Government medical advice and ensured that any

staff for whom the risk was high were placed on special leave for their own health protection. A Coronavirus Risk Assessment, developed by Disability Equality Scotland was adopted by SAS and implemented for all managers to use with their staff. This guidance was made widely available to all the SAS staff and the relevant forms and detailed supporting information were accessible on the SAS internal intranet site. Managers were also briefed separately to ensure that risk assessments took place with the relevant vulnerable groups in our workforce.

143. Similarly for those staff with specific underlying medical conditions, national and local advice was clear, and those staff were placed on special leave automatically to ensure they did not suffer any further complications as a result of Covid-19 as well as being protected from other staff. The specific length of special leave required was dictated by individual circumstances and was influenced by the Covid-19 risk assessment and ongoing medical advice. A list of nationally prescribed underlying conditions from SG highlighted the clinical risk to staff members as a result of contracting Covid-19 and what options should be considered to protect their health. These included working from home, from an alternative work location or, in the most serious cases, not attending for work under any circumstances.

144. Active monitoring of these staff was undertaken, and regular contact maintained in order to reduce the level of vulnerability to Covid-19. Risk assessments were completed in writing and logged on the staff member's personal file so that the relevant supporting evidence was available to assist any future decision making required.

145. Clearly the impact of the pandemic has been profound. Like many others in the community, many of our staff contracted Covid-19 and had to take time off work to recover. Regrettably, some staff have not overcome their symptoms and have now been diagnosed with long covid requiring longer term medical and emotional support. The Service will continue to support these staff as proactively as possible. This support comprises ongoing occupational health advice, specialist medial support where required and regular contact with the Service to provide support and reassurance. Additional measures can also include an adjustment to normal work duties, reducing or altering working hours, or change of role. The Service has in place an extensive wellbeing support package to assist any staff member who finds themselves in such circumstances. The overall impact of the pandemic has been significant on staff welfare and wellbeing. Physically, mentally, and emotionally, staff are exhausted,

anxious about themselves and their loved ones and uncertain as to whether the pandemic is truly over.

146. In addition, the stresses of the winter past (2022-23) and the potential threat of industrial action have also contributed to create a level of anxiety which had clearly challenged the resilience of all our staff. Our wellbeing strategy has supported all our staff and will continue to provide short, medium- and long-term support for staff in all aspects of their working and personal lives. Staff wellbeing has never had such a positive focus within the SAS, and we will continue to put in place any measure which will maintain our staff's wellbeing and improve their working environment within SAS. We have also just launched our Trauma Risk Management (TRiM) programme which provides trauma-focused peer support, designed to help staff who have experienced a traumatic, or potentially traumatic, event at work.

147. Finally, agile and hybrid working are now becoming the norm within the SAS and the need to maintain all our current estate portfolio is being reviewed as the workforce dynamic is changing significantly.

Protecting our Staff and Patients: Infection Prevention Control

148. The SAS has a legal responsibility under the Health and Safety at work Act 1974 (HSWA) to ensure the health and safety of all employees and anyone affected by their work. Under the Control of Substances Hazardous to Health (COSHH) regulations; the Service must provide personal respiratory protective equipment to staff who could be placed in respiratory harm as a consequence of their duties.

149. In legal terms, Respiratory Protective Equipment (RPE) is a line of protection. Where RPE is to be used as a control measure, it is vital that it is adequate and suitable protection for the individual wearer, they must undergo face fit testing. In addition, these staff must be provided with adequate training to ensure that any face fitting mask will provide the specified protection.

150. Further to this, the introduction of NHS Scotland National Infection Prevention and Control Manual (NIPCM) in January 2012, and specifically chapter 2 (transmission-based precautions) substantially increases the number of occasions our staff should be using appropriate respiratory equipment.

151. The National Infection Prevention and Control Manual (NIPCM) provides Infection Prevention Control guidance to all those involved in care provision and is considered best practice across all health and care settings in Scotland. The Manual is evidence based and aims to provide care staff with easily accessible information and supporting tools for infection prevention and control. It also aims to reduce practice variation and reduce the risk of healthcare associated infection (HAI). The contents of this manual mandated the infection prevention and control in ambulances.

152. In terms of the formulation of infection prevention and control measures within ambulance vehicles and work environments, the SAS complied with guidance on infection prevention and control from Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) Scotland within the National Infection Prevention and Control Manual (NIPCM). The NIPCM was first published on 13 January 2012, by the Chief Nursing Officer (CNO (2012)1), and updated on 17 May 2012 (CNO(2012)01-update). NIPCM compliance is mandatory for all NHS boards in Scotland.

153. Public Health Scotland provided particular guidance on staff isolation, exemption from isolation and testing. The SAS complied with this guidance which was in the form of Scottish Government Workforce Directorate letters.

154. ARHAI Scotland also provided rapid reviews of the literature on Covid-19 and transmission frequently. From 1 March 2020 until the 28 June 2022, they would hold incident support group meetings with Infection Control Teams (nurses, doctors and managers) with representatives from Public Health Scotland attending also, to discuss the changes to the NIPCM, to implement these changes, and share challenges with implementation at NHS Boards level. A member of our Infection, Prevention and Control team always attended these meetings to represent the SAS. The group would also share standing operating procedures / methodology / protocols and tools which we could adapt for local use. A nurse consultant would chair the meeting and an action log was kept up to date by ARHAI Scotland.

155. Specific ambulance infection prevention and control (IPC) guidance, aligned to guidance from the NIPCM, was necessary to support our staff's understanding of IPC practice during the pandemic. Our responsibility in this regard was focused on our own service and did not extend to other ambulance service providers across the UK. The SAS IPC team were also members of the National Ambulance IPC group which had

representation from all four countries. This was an opportunity to share ambulance specific guidance that aligned with NIPCM Scotland.

156. The SAS complied with Healthcare Improvement Scotland on Healthcare Associated Infection standards that were launched in NHS Scotland in 2015. The standards were reviewed and updated in 2022 and SAS had IPC representation on the group.

157. In Scotland, Infection, Prevention Control advice came from ARHAI Scotland or as mentioned above, Public Health Scotland. It is these organisations that represent the SAS at a UK level and would advise us accordingly on changes to the NIPCM or via Scottish Government Directorate letters.

158. At the end of January 2020 Covid-19 was being categorised as a High Consequence Infectious Disease (HCID) and as such the Service had agreed that only the Specialist Operational Response Team (SORT) had the appropriate training and RPE to responds to these types of calls. However, it was obvious that SORT alone would not be able to provide a service to the number of patients expected.

159. There was UK guidance on the Gov.UK website from 10 January 2020 - Covid-19: Infection prevention and control (IPC). The SAS developed ambulance specific guidance aligning with UK guidance titled, Scottish Ambulance Service PPE Guidance during Covid-19 pandemic (version 1.00 20 April 2020 to version 4 the present day).

160. In 2017, the SAS issued guidance, taken from NIPCM, on Severe Respiratory Illness from Novel or Emerging Pathogens e.g. Middle East Respiratory Syndrome Coronavirus (MERS-CoV) and Avian Influenza (e.g. A/H7N9, A/H5N1). This guidance was made available to all staff via our internal intranet site. The guidance remained unchanged throughout the course of the relevant period. The guidance confirmed that the following PPE be used for Covid-19 patients:

- Long-sleeved, fluid-resistant coveralls.
- Non-sterile disposable gloves.
- A Filtering Face Piece (FFP3) respirator conforming to (EN149:2001): Face Fit testing had to be undertaken prior to using this equipment and fit checking was to be performed each time an FFP3 respirator is worn.

- Eye protection compatible with the FFP3 respirator (prescription glasses do not provide adequate protection against droplets, sprays and splashes).

161. Whilst face fit testing was carried out prior to the pandemic, in June 2020, the SAS Health and Safety Team circulated an internal SAS Face Fit Testing Procedure to all staff to ensure that they were adhering to the correct procedure as outlined in the Health and Safety Industry Guideline (INDG479). A PPE group in the SAS was set up by the Director of Care, Quality and Professional Development who had Executive responsibility for PPE and face fitting testing.

162. A chronology of changes to infection prevention and control measures in ambulance healthcare settings during the relevant period and the reason for such change is shown in exhibit PB/13 [INQ000303187] and also included:

- Covid-19 decontamination of ambulance vehicles, management of linen and waste guidance 18 March 2020 and remained in place past 28 June 2020.
- SAS policy on Station, Vehicle (including Aircraft) and Equipment Cleaning Schedule (Based on NHS Scotland National Cleaning Service Specification NCSS June 2016). First published in January 2009
- Scottish Ambulance service PPE guidance during Covid-19 pandemic version 1.1-1.4 2 April 2020 and version 1.4 remained in place after 28 June 2020.
- SAS Covid-19 guidance (February 2021 until May 2022) was developed. A Scotland version of guidance 6: Working Safely in UK Ambulance Services during Winter 2021-22: AACE / QIGARD, December 2021 linking with NIPCM (Scottish Version Winter Respiratory Guidance)
- Patient Transport Guidance, 2020 (24 March 2020 version 3, 2021 (5 February 2021 version 4) and 2022 (7 April 2022).

Protecting our Staff and Patients: Personal Protective Equipment

163. The logistics and supply chain within the SAS at the time of the pandemic was significantly tested as we rolled out PPE and other supplies at pace across the Service.

164. At the start of 2021, the SAS carried out an extensive review of the then current model which included learning from Covid-19 to provide alternate sustainable solutions. The review found that prior to the start of March 2020, our logistics and inventory management for PPE/RPE was managed locally within our regions across Scotland, with procurement undertaken through the internal stores ordering system, PECOS.

Sufficient supplies for the relevant station requirements were ordered locally by operational staff with these goods being delivered to individual stations by third party suppliers, with stocks arriving in box quantities. The model the Service used at this time did not allow for stockpiling large quantities of stock, especially the volume required throughout the pandemic. PPE was used for specific patients and specific circumstances whereas following the categorisation of a pandemic, PPE was used for every interaction with any individual.

165. Addressing the legacy model issues and the lessons learned at the start of the pandemic, in February 2021 the SAS Board were presented with three options; to continue with the status quo, to return to the previous system of using third party suppliers or to develop the centralised model. The SAS Board approved a new centralised logistics service (spoke and hub model of logistics) which created three regional logistics hubs in our three regional areas (East, West, North) which enabled the SAS to continue their partnership with the National Services Scotland National Distribution Centre, receiving large quantities of key PPE stock items delivered to the three regional hubs, and from there our own staff distributed the required supplies to our local stations. The West Region hub was implemented in April 2021, the East Hub in September 2021 and North was March 2022. It was recognised by the Board and the Executive Team that this new model would benefit patients and staff by reducing the risk of areas running low or out of stock of critical clinical items and PPE.

166. The fragility of our operating model was highlighted during the initial months into 2020 when global demand was at its highest and securing supply from regular private providers was impossible for the Service. The private providers informed us they could not maintain this level of supply to us.

167. To address the issue urgently, in February 2021 the SAS procurement team took over responsibility for purchasing the Services supplies of PPE and RPE. They arranged to secure bulk stock of PPE, delivered to the SAS by the National Services Scotland National Distribution Centre to both the identified logistics hubs in the East and West of Scotland. This arrangement remains in place today. The majority of the PPE supplied was suitable for use across the Service, however, there was an increased requirement for face fit testing for FFP3 masks. In order to be compliant with Health and Safety regulations, staff must undergo Face Fit Testing for every type/make of FFP3 mask they are required to wear. In order to reduce the number of face fit tests required it was important to try to maintain stocks of the same make of mask for

members of staff. When there was a lack of FFP3 masks that the SAS staff had already been face fit tested on, every avenue for procuring these was investigated and stock was acquired to ensure a continuity of supply. In the meantime, staff were face fit tested on alternative types of masks where stock holdings might be greater. Whilst we did not run out, there was a shortage of the white coveralls that were approved for use by our front line crews. Again, every avenue for procurement was investigated until bulk supplies were obtained via National Service Scotland National Distribution Service.

168. To source the clinically and technically compliant supplies of all relevant PPE (masks, aprons, coveralls, face shields, gloves, hand gel, wipes, respirators) our Procurement Team took a three-tiered approach to securing supplies. Initially they approached all our known suppliers. Secondly, they approached multi contract suppliers which were on approved Scottish Government purchasing frameworks or approached National Services Scotland to ask if they could support our request. Finally, they sourced supplies from other suppliers, for example Amazon. Each time an item of PPE or RPE was purchased, the team obtained the technical specification to ensure that all supplies were clinically and technically compliant with the relevant regulations.

169. Where RPE is to be used as a control measure, it is vital that it is adequate and that it provides suitable protection for the individual wearer. For this, the wearer must undergo face fit testing (face fit testing using AMP devices and training was first introduced to the Specialist Operational Response Teams (SORT) in the Service in 2017 and rolled out to the Divisional Teams in 2020). To discharge this duty of care, the SAS instigated a system of Face Fit Testing across the country using the ambient particle counting (AMP) devices with trained Face Fit testers as well as undertaking additional training to support further face fit testing. The Service used both qualitative and quantitative methods to support the process, based on availability of equipment at each base. The SAS hired in additional quantitative testing machines in the first instance and laterally procured additional face fit testing machines to support nationwide spread and sustained resilience.

170. There are now around 3,200 staff face fit tested across the Service, some on a number of FFP3 mask types to ensure resilience. This has given the service significant capability across the system to deal with the care of patients where aerosol generating procedures (AGP) are required to be undertaken. The SAS also consulted other

boards via the Executive Nurse Directors infrastructure in their experience of Face Fit Testing and utilised the information to inform the SAS approach.

171. The information for each staff member in relation to Face Fit Testing was stored on a central database and provided data at an individual, station, sub-regional, regional, and national level, as well as by mask type, pass and failure rates.

172. It was noted that not all staff were able to wear FFP3 masks due to either their facial structure or more commonly the presence of facial hair. The presence of facial hair (even 24-hour stubble) can effectively render the FFP3 mask ineffective depending on the make of the mask and the individual (this is based on the lived experience). Most staff ensured that they were always clean shaven, but staff who continued to have facial hair either by choice or through their religious beliefs, were provided with alternative, suitable and compliant RPE.

173. Due to the limited availability of FFP3 masks from the market, Scottish Government authorised the release of pandemic stock that was being held centrally by National Procurement. However, as this stock had been procured previously, it had now passed its expiry date. Prior to its release, the products were sampled by the manufacturer who approved that the shelf life could be extended to allow for their use by NHS Scotland. This approval was subject to a visual inspection being carried out by the user prior to use. These stocks were subsequently removed from service when supplies of new product became available. There was concern from staff members, voiced through their union representative, that they were being given expired items of PPE to wear. It was challenging at the time to counter this narrative and to ease the anxiety and distress this caused.

Organisational Reflections: Lessons Learned thus far and future priorities.

174. We are proud of the way in which our staff continued to work hard to provide care and compassion to our patients, especially at a time where there was limited information on the health implications and impact of Covid-19. Our Staff, like the rest of the world, whilst focusing on their patients and the service they delivered, were concerned about their own safety, the safety of their team, and of their loved ones. Many made considerable personal sacrifices in order to continue serving our patients whilst also trying to keep their families safe.

175. During the relevant period, the Service demonstrated its ability to develop and scale up new services at pace. In addition to the introduction of our Mobile Testing Units, Mobile Vaccination Units, and the clinical support to the Louisa Jordon Hospital, we established various cells (Strategic, Management, Logistics) at National, Regional and Local Hubs which opened clear lines of communication and guidance and provided confidence to staff and partnership colleagues. A robust mechanism was established for getting communications out and across the various cells, and our Information and Communication Technology (ICT) Teams supported the establishment of various communications channels to allow staff to continue to work effectively, specifically from home where appropriate.

176. The SAS is committed to learning from incidents and issues and learning was acted upon throughout the pandemic to adjust our approach and practices. Learning from the earliest days of the pandemic included: ensuring that our plans were flexible and that management structures were clear and robust; that our staff were trained and exercised for the command roles that they undertook; that there was suitable and sufficient PPE for all staff; that staff were all face fit tested for their PPE masks and that appropriate training was in place in the use of the PPE.

177. Our 2030 strategy sets out our vision to save more lives, reduce inequalities and improve health and wellbeing. Our vision is to work together with the people of Scotland, our staff and our partners to deliver sustainable effective care, experience and treatment, anticipating needs and preventing ill health.

178. Forecasting and planning arrangements are now embedded as part of business as usual and used to inform staffing requirements to meet expected demand levels at local level. The SAS Executive Team have oversight of this to ensure necessary action is taken on an ongoing basis to increase/decrease staffing levels in line with requirements.

179. The SAS also continues to work with an external modelling consultancy firm that specialises in ambulance 'Demand and Capacity' modelling to review requirements and refresh our modelling on a mid to long term basis, taking account of changes in our own system as a result of the pandemic and impact of wider system pressures or transformation. This now also includes both the Ambulance Control Centre and Patient Transport Service modelling.

180. To enable delivery of our strategic ambitions and to enhance resource planning arrangements, we have conducted a review of our resource planning function, in relation to structure, roles, responsibilities, opening hours, systems, processes, training, and reporting. Our plan is to implement a number of improvements in the year ahead to optimise our resource planning model, enabling a co-ordinated response to major events/incidents or a future pandemic.

181. Another key area of focus within our strategy is to work with local communities and partners to create safer and healthier communities, this involves enhancing the role of volunteers and developing more resilient services to meet the needs of local communities.

182. The SAS also has a key role to play in supporting the reform of Primary and Urgent Care by further enhancing our provision in and out of hours in the future supporting a wider contribution to the response to a pandemic.

183. Our plan is to build on the success of remote triage, initiated during the pandemic by expanding and enhancing our Integrated Clinical Hub, which will ensure that we can guide patients through the most appropriate care pathways for their medical complaints by either referring them to other areas of the health system, or by treating more patients safely over the telephone, thereby avoiding unnecessary attendance at hospital. This will not only improve the patient care experience but will also ease the pressure on Emergency Departments.

184. Our workforce plan is aimed at attracting a more diverse workforce, agile working, improving retention and staff absence through increased focus and support arrangements on welfare. Over the course of the next five years our plan is to increase our paramedic workforce and thus to increase our capability to treat more patients safely at home.

185. These examples aim to show how the SAS is continually evolving, learning lessons, and developing in order to improve service provision to the people of Scotland.

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: 6 November 2023