

Witness Name: Nick Smith

Statement No: M3/YAS/01

Exhibits: 31

Dated: 20 September 2023

MODULE 3 OF THE UK COVID-19 PUBLIC INQUIRY

Witness Statement of [Mr Nick Smith]

I **Nick Smith** will say as follows:

1. I make this statement in relation to my experience of working at Yorkshire Ambulance Service NHS Trust ("YAS") since November 2018; and specifically, my experience as Executive Director of Operations, Accountable Emergency Officer during the period of 1 March 2020 until the 28 June 2022.
2. In my role as the Accountable Emergency Officer during the above period I oversaw a number of actions that were taken by YAS in response to the Covid-19 Pandemic.
3. In addition to supporting evidence, I have highlighted below the key dates that relate to the initial stages of the YAS response to the Covid-19 pandemic within the specified period:
 - 2 March 2020, YAS escalated to Resource Escalation Action Plan ["REAP"] level 3;
 - 11 March, the World Health Organization ["WHO"] categorised Covid-19 as a pandemic;
 - 17 March 2020, YAS escalated to REAP level 4;
 - 23 March 2020, the United Kingdom went into full lockdown;
 - 3 April 2020, in line with all other ambulance services in England YAS escalated to Card 36 of the National Demand Management Plans. A description of Protocol 26 can be found on page 7.

Organisational Structures and Governance

Trust Board

4. Pre-pandemic, the structure of the YAS Trust Board ["Board"] comprised six Non-executive Directors ["NEDs"] including a Non-executive Chair, five Executive Directors including the Chief Executive and three non-voting Directors. The Board members over the Covid-19 pandemic period are listed below:

Non-Executive Directors

- Kathryn Lavery, Chair;
- Tim Gilpin, Non-executive Director/Deputy Chair;
- Anne Cooper, Non-executive Director;
- Jeremy Pease, Non-executive Director;
- John Nutton, Non-executive Director to June 2021, replaced by Stan Hardy until October 2021. Stan Hardy was then replaced by Andrew Chang, Non-executive Director from October 2022;
- Amanda Moat, Non-executive Director from 5 June 2021.

Executive Directors

- Rod Barnes, Chief Executive;
- Steve Page, Executive Director of Quality, Governance and Performance Assurance/Deputy Chief Executive (to 30 June 2021) who was replaced by Clare Ashby as Interim Director of Quality, Governance and Performance Assurance from 1 July 2021;
- Mark Bradley, Executive Director of Finance (to 31 July 2020) who was replaced by Kathryn Vause as Interim Executive Director of Finance from 1 August 2020 until 31 July 2021 when she was appointed to the substantive position;
- Dr Julian Mark, Executive Medical Director (on secondment to NHS England from 12 October 2021) with Dr Steven Dykes, Interim Executive Medical Director, from 13 October 2021;
- Nick Smith, Executive Director of Operations, my substantive position.

Non-voting Directors

- Christine Brereton, Director of Workforce and Organisational Development (to 31 December 2020) who was replaced by Suzanne Hartshorne on an interim

arrangement from 1 January 2021 to 18 June 2021, with Mandy Wilcock appointed as Director of Workforce and Organisational Development from 1 June 2021;

- Karen Owens, Director of Urgent Care and Integration
- Simon Marsh, appointed as Chief Information Officer on 30 March 2020.

- 4.1 As well as bi-monthly Board Meetings, the Board also discharged its responsibilities through several sub-committees; each was chaired by either an Executive or Non-Executive Director.
- 4.2 During the pandemic the Board continued to meet as planned. However, sub-committee meetings were shortened wherever possible to create additional Executive leadership capacity to support the Trust's Command Structure. This allowed Executives to undertake daily Covid-19 Trust Executive Group ["TEG"] meetings that were established to speed up decision making and support appropriate requests that came from the Strategic Commanders.
- 4.3 The organisational structure and governance of YAS was consciously adapted to meet the changing requirements of the Trust's response to the Covid-19 pandemic. YAS worked to the national Pandemic Influenza Operating Framework High Consequence Infectious Diseases Guidance. Emergency protocols were also put in place, which included working to the Major Incident Procedure, the Incident and Serious Incident Management Policy, the Clinical Alert High Demand Plan; and the Resource Escalation Action Plan (REAP).

Command Structure

5. A dedicated command structure was put in place from the start of the Covid-19 pandemic. A key part of the effective command structure was the implementation of daily Covid-19 Strategic Meetings, chaired by the Strategic Commander. The Strategic Commander then escalated issues where appropriate to the daily Covid-19 TEG meetings with decisions fed back into the next day's Strategic Meeting. That approach helped the Trust to make swift decisions with good governance.
- 5.1 Some examples of decisions that made in this way include:
- TEG supported the strategic recommendation that Protocol 36 to remain in place.
 - TEG agreed to suspend meal break policy to cover for Category 2 as well as Category 1.

- Overview of conveyance approach to be managed through Safer Care group.
- Corporate Cell recommences reporting into the 1:30pm call.

Key Decision Makers

6. In addition to the Board, there were a number of key individuals who made key decisions whilst undertaking roles present at the daily Covid-19 Strategic Meetings. These roles are described below:

Strategic Commanders

- 6.1 The day-to-day response to the pandemic was overseen by a Strategic Commander supported by the Executive Team. The Strategic Commanders are a team of eight specifically trained and experienced senior managers who rotated through the role initially on a week-by-week basis. This rotation later changed to a 4 day - 3-day basis in response to welfare concerns. During the pandemic, the senior managers undertaking the Strategic Commander role were as follows:
- 6.2 The Deputy Director of Operations, Stephen Segasby. As well as Strategic Commander he was responsible for the day-to-day delivery of the 999 service including emergency ambulances and the 999-call taking function. He also deputised for me during annual leave. Stephen left the organisation in July 2021.
- 6.3 The Associate Director of Operations was Jeevan Gill. Jeevan was responsible for the Emergency Preparedness, Resilience and Response ["EPRR"], community volunteers, the ambulance operational aspects of the Yorkshire Air Ambulance ["YAA"] and the private ambulance service that provided cover to sporting events.
- 6.4 Reporting into the Deputy Director of Operations were three Heads of Service Delivery who were responsible for the five Clinical Business Units ["CBUs"]. These were Paul Mudd who was responsible for covering the North & East Riding CBUs, Jackie Cole who covered the South CBU and John McSorley who covered the remaining two CBUs in West Yorkshire. The Heads of Service Delivery were responsible for the day-to-day running of their CBUs and undertaking the role of Strategic Commander.
- 6.5 Also reporting into the Deputy Director of Operations was the Head of Service Central Delivery, Pauline Archibald. That role was responsible for running the EOC.

- 6.6 The Strategic Command Team was also supported by the Associate Director of Paramedic Practice, Mark Millins and John Holden, Head of Emergency Preparedness, Resilience and Response ["EPRR"].
- 6.7 I can confirm that all of the above staff were trained and qualified to national standards and were competent Strategic Commanders.

Other Key Decision Makers

- 6.8 In addition to the Executive Directors and Strategic Commanders there were other key decision makers within the YAS during the pandemic.

Integrated Urgent Care

- 6.9 The Integrated Urgent Care ["IUC"] service line was led by Karen Owens, Director of Urgent Care and Integration, who reported directly to the Chief Executive.
- 6.10 Karen Owens was supported by the Associate Director of IUC, Keeley Townend, until Keeley left in September 2021. Mark Leese covered the role on an interim arrangement from October 2021 onwards. The Associate Director of IUC was responsible for the safe and effective delivery of the IUC service and associated contract and worked with key stakeholders.
- 6.11 The Head of Operational Services Delivery in IUC was covered by Mark Leese. That role focused on the day-to-day delivery of the IUC service line.
- 6.12 The GP and Clinical Director for IUC was Dr Eithne Cummins. Dr Cummins was responsible for the provision of clinical and management support for the IUC service to appropriate standards of care and clinical governance.
- 6.13 The Head of Nursing in IUC was covered by Michela Littlewood-Prince until June 2020 when the role was taken by Sue Williamson. This role provided professional nursing leadership for nurses within IUC.

Non-Emergency Patient Transport Service

- 6.14 The Managing Director of Non-Emergency Patient Transport Services ["NEPTS"] was Chris Dexter. Chris was responsible for contracts, budgets and the quality of service and standards during the Covid-19 pandemic. Chris worked closely at a national level with AACE and NHSE leads for NEPTS; which, included Infection Prevention and

Control ["IP&C"] and informing and contributing towards national policy around patient transport during the Covid-19 pandemic.

- 6.15 The NEPTS Head of Service and Standards was David Green. That role was responsible for the safety of NEPTS patients, staff, volunteers and sub-contractors. The role was instrumental in liaising and engaging with the Trust's IP&C Lead.
- 6.16 The NEPTS Head of Operations was Candice Syron. However, during the reporting period the role was filled by Richard Tweed. That role was responsible for the day-to-day delivery of the NEPTS service.

Policies and Procedures

7. As at 1 March 2020, YAS had key **relevant** documents in place. The list provided below is not an exhaustive list:

- "Major Incident Procedure"
- "High Consequence Infectious Diseases Protocol"
- "Incident and Serious Incident Management Policy"
- "National REAP Policy"
- "YAS Commander Framework"
- "Business Continuity Policy"
- "Pandemic Influenza Operating Framework"
- "YAS Demand Management Plan"
- Respiratory Protective Equipment (RPE) SOP

- 7.1 There were a number of relevant policies and procedures introduced or changed during the Covid-19 pandemic. A list of all clinical alerts has also been provided. [NS/01 - INQ000269151]

- 7.2 The Demand Management Plan (DMP) [NS/02 - INC000269152] was designed to be utilised in situations of excessive call volume which results in the supply of ambulance service resources being insufficient to meet the clinical demand. When the demand on our service exceeds the available resource capacity, we have a robust plan of action that is implemented to ensure that we can still maintain a clinically safe level of service. The plan was designed to target resources towards life threatening 999 calls when demand is at significantly higher levels than normal. The DMP is structured and triggers different actions, depending on the level of escalation at the time. There were five levels of escalation within the plan, Level 1 being the lowest and Level 5 being the

most severe. Level 1 being business as usual up to level 5 indicating critical pressures on the service.

- 7.3 We had implemented our Clinical Safety Plan (CSP) [NS/04 - INQ000269154] which is designed to be utilised in situations of excessive call volume which results in the supply of ambulance service resources being insufficient to meet the clinical demand. When the demand on our service exceeds the available resource capacity, we have a robust plan of action that is implemented to ensure that we can still maintain a clinically safe level of service. The plan is designed to target resources towards life threatening 999 calls when demand is at significantly higher levels than normal. There are four levels of escalation within the plan, Level 1 being the lowest and Level 4 being the most severe. Level 1 indicates the service is operating under business as usual up to level 4 which means we are working at a critical escalation level. The EOC Call Taker Script v24 is provided to illustrate the different levels and call exit scripts within the plan [NS/03 – INQ000269153].
- 7.4 Each levels actions were designed to be taken before triggering the next escalation level ensuring that action is taken in a proportionate and staggered way. These actions all have the same goal of increasing the availability of ambulance resource to attend to the most acutely unwell patients. This means the plan also includes actions where callers may be advised to seek assistance from another area of the health service, this is because the availability of ambulance resource at the time would likely lead to a delay in them receiving care.

Clinical Safety Plan

- 7.5 The YAS Demand Management Plan ["DMP"] was in place at the start of the reporting period but was superseded by the introduction of a Clinical Safety Plan ["CSP"] approved on 20 October 2021 v1.3 [NS/05 – INQ000269155] and was updated on 15 March 2022 v1.10 [NS/04 – INQ000269154] . Both documents described how the ambulance services (including 999, 111 and PTS) would be scaled up or down if required to respond to each area of most need. To support the effective use of DMP/CSP there was an increase in senior clinicians to support decision making for crews, which reduced conveyance rates to hospital.

Protocol 36

- 7.6 All 999 calls received into the EOC were issued with a response code based on the information provided by the caller. These codes categorised the incidents and determined the response timeframe standard and the most appropriate resource. To identify the priority of every call we received, the 999 call takers or Emergency Medical

Dispatchers (EMDs) asked a series of questions about the patient's condition. These questions were common to nearly all UK ambulance services and are based on internationally agreed standards. The information provided by the caller about the patient's condition was used to determine the priority for response.

- 7.7 The Advanced Medical Priority Dispatch System (AMPDS) is the system YAS used to guide 999 call takers through the call process. The call taker would select the most appropriate category from the system also known as the 'chief complaint' and worked through the key questions presented within this category. The questions within each category alerted the call taker to symptoms that could be regarded as possibly life-threatening, and an appropriate response code was assigned to the call. The protocol used was very structured and designed to obtain the most relevant information quickly and efficiently. The priority response codes were based on the absence or presence of priority symptoms set by NHS England in line with AMPDS.
- 7.8 In March 2020, a module of AMPDS, known as Protocol 36, was updated, alongside a national escalation process, to improve the triage process for AMPDS and Pathways in readiness for the expected significant surge in demand of suspected and confirmed Covid-19 cases. Card 36 was used by 999 call takers to assess patients with difficulty breathing (card 6), chest pain (card 10), and sick person (card 26) to screen for suspected influenza patients and only used in an outbreak, epidemic or pandemic. Card 36 was updated and adapted to meet the needs of Covid-19 patients. Systems were put in place to manage Covid-19 patients via a separate queue, which enabled a detailed triage process.

Clinical Care

- 7.9 The impact of the Covid-19 pandemic on the ambulance service and pre-hospital clinicians was profound and, due to the rapidly emerging evidence and changing case definition, required frequent and rapid changes to the clinical model and guidance. A clinical alert sent out by the Executive Medical Director on 19 March 2020 recognised the commitment and dedication of staff in responding to the outbreak and acknowledged that staff were working in unfamiliar circumstances in an unprecedented situation. The alert accepted that staff may need to depart from previously agreed guidance and procedures, and that staff must follow instructions without facing repercussions from the Trust and regulators. Due to extreme pressure on the wider healthcare system, ambulance clinicians were under increased pressure to keep patients at home and was further exacerbated by patient fear of being conveyed to hospital due to the risk of infection. A clinical alert issued on the 11 April 2020

reminded frontline clinicians that there were no changes to the conveyance policy and if patients required admission to the Emergency Department they should be conveyed.

- 7.10 Every part of the NHS was under pressure, in part due to the COVID19 community transmission rates impact on patient demand and staff sickness. Acute Trusts attempting to tackle backlogs in elective care, manage a reduced bed base due to infection control measures. COVID-19 and non-COVID19 sickness continued to climb, and the psychological impact of the pandemic. There was a surge in patients trying to access Primary Care then experiencing perceived or actual barriers to care and sought help elsewhere in the Urgent and Emergency Care system. Some patients were trapped in a cycle of seeking help in an over pressured system. The combination of these factors has had a negative impact on Integrated Urgent Care and 999 performances and patient safety. Patient harm was occurring due to delays in answering 999 calls, significant delays on our Category 2 performance, in our response to Intra Facility Transfers for patients with confirmed strokes, heart attacks and major trauma, and in the back of ambulances queuing to hand patients over at Acute Trusts.
- 7.11 In March 2020, a Senior Clinical Support Cell ["SCSC"] was implemented to provide senior clinical advice and support; this was staffed with senior paramedics, nurses and doctors. The SCSC continued to be utilised throughout the Covid-19 pandemic. On the 3 November 2020, the SCSC was promoted to support frontline staff in clinical decision making and support non-conveyance. On the 31 December 2021, a clinical alert was issued for the conveyance of patients in areas under extreme pressure. The alert instructed clinicians to contact the SCSC prior to conveying patients to the ED unless certain criteria were met.
- 7.12 The senior clinical support cell was put in place to support the clinical decision making for crews at the scene of emergency calls. The Trust's continuously promoted the basis for the clinical care provided must be patient centred and must take account of individual circumstances. The Trust also maintained the principle that if an individual needed to be conveyed to hospital, then they should be. However, the pandemic introduced numerous complexities to this and it as paramedics operate independently in a largely unsupervised practice setting the formation of a senior clinical cell would assist them in making sound clinical decisions. The support cell provided a method of sense checking clinical decisions regarding conveyance and or referral to community providers and allowed paramedics to avoid making these decisions in isolation.

- 7.13 A clinical alert published on the 17 March 2020, provided guidance to improve on-scene time and decision making on scene. It stated that decisions to transport patients need to be made as early as possible, that any conditions with an immediate threat to life should be corrected on scene and then conveyed to hospital.
- 7.14 A clinical alert published on the 11 April 2020 reminded YAS clinicians that, despite Emergency Departments questioning conveyance of patients, there were no changes to the current processes or protocols, which included those that related to end-of-life patients, and that staff should continue to convey patients from all community settings to hospital where further treatment of care was needed.
- 7.15 The Joint Royal Colleges Ambulance Liaison Committee (JRCALC) Plus App had been deployed in YAS prior to the outbreak and provided ambulance staff with digital access to the national clinical guidelines for ambulance services, regional guidelines and pathways, and the ability to publish clinical alerts. The app became vital to disseminate the latest guidance and to update the local pathways.
- 7.16 Although the app was an effective way of ensuring clinical staff received updates to changes to local pathways, there were other methods used for the cascade of important information. There were staff updates that were emailed to all staff daily (reducing frequency to 3 times per week when clinical changes became less frequent). These notices were also placed on station noticeboards for all staff to see. There were also group briefings on a weekly basis for team leaders and managers that were also used as a communication method. There was also a dedicated intranet space where all members of staff could access all documents and briefing documents.
- 7.17 As the Covid-19 pandemic progressed it impacted on service delivery across health and social care, which required changes to patient pathways and access routes, along with the continuous evolving guidance on Personal Protective Equipment ["PPE"]. Due to the regularity of changes a clinical alert was published 24 March 2020, which advised staff to use the JRCALC App for any pathway advice and individual alerts would not be issued on any local pathway updates. YAS continued to work in partnership with health and social care partners throughout the Covid-19 pandemic, at a national, regional and local level to ensure adherence with the latest evidence and operational changes within other services.
- 7.18 Examples of clinical pathways changes agreed with local partners are provided in paragraphs 7.12-7.16. YAS was a member of ICS and place level executive groups,

enabling the sharing of local intelligence and joint working on issues such as PPE supply, testing and vaccination. Other examples included a change to protocol to introduce staff testing prior to entry to care home, deployment of HALO roles to support Emergency Department handover and shared information from acute Trusts to enable prioritisation of renal and cancer patients for PTS services.

Major Trauma Pathway

- 7.19 On the 9 April 2020, the Major Trauma Pathway and the Major Trauma Triage Tool [NS/06 - INQ000269156] was updated following a decision by the Major Trauma Network that only the most critically injured patients (the first 2 steps of a 4-step tool) would bypass local hospitals and be taken directly to a major trauma centre. All other injured patients were required to be taken to a local hospital. A clinical alert published on 9 April 2020 updated staff on these changes [NS/07 – INQ000269157]. A clinical alert published on 1 June 2020 [NS/08 – INQ000269158] updated staff that this decision was reversed on the 3 June 2020, when all 4 steps of the tool triggered a bypass to the Major Trauma Centre.

Heart Attack Pathways

- 7.20 A clinical alert published on 21 March 2020 updated staff on the changes that acute trusts had made to their Primary Percutaneous Coronary Intervention [“PPCI”] pathway to ensure continuity of care. That included occasions when crews may be diverted to a specific location, or designated route and in some instances may require patients to be held in the back of an ambulance whilst the hospital prepared the department. A clinical alert published on 24 March 2020 updated staff on the risk assessment for PPE [NS/11 – INQ000269161].

Maternity Patients

- 7.21 A clinical alert was published on 28 May 2020, by Public Health England, which included guidance for secondary and community care settings around the use of PPE and childbirth. Separate to the ambulance guidance, in settings where childbirth was active, Level 2 PPE could be worn with coveralls/sleeved gowns, or aprons. The decision to wear a coverall/gown in those circumstances was an individual one supported by the Trust. Where Aerosol Generating Procedures [“AGPs”] were required, or likely to be required, Level 3 PPE was required to continue to be worn and the approach to Category 1 calls remained unchanged as per the Staff Notice issued on 21 April 2020, and Clinical Alert: Category 1 Procedure for PPE issued on 27 April 2020.

Patients at Risk of an Adrenal Crisis

- 7.22 A clinical alert was published on the 20 August 2020, which followed a National Patient Safety Alert and reminded clinicians of the need to administer higher doses of steroids to those patients with adrenal insufficiency who become acutely ill or are injured.

Respiratory

- 7.23 Due to the risk of contamination, peak flow meters were withdrawn from use and a clinical alert was published on 2 April 2020. Further guidance was also published on restricting the use of auscultation and ENT assessments to reduce the risk of Covid-19 transmission to ambulance staff.
- 7.24 Due to concerns in diagnostic overshadowing a clinical alert was published on the 1 June 2021, which required clinicians to undertake comprehensive history taking, physical assessment and consider differential diagnoses in order to ensure that they had considered all possible underlying causes and red flags. The guidance referred the clinicians to JRCALC guidelines on Hyperventilation Syndrome, Dyspnoea and Cardiac Rhythm Disturbance to provide a helpful reminder of all conditions that required consideration for exclusion.
- 7.25 Other outbreaks occurred during the Covid-19 pandemic, which included SARS and Avian influenza. On 24 November 2021, a clinical alert was issued as Avian Influenza was classified as a High Consequence Infectious Disease and care of suspected or confirmed cases required a specialised response. The alert directed staff to the JRCALC App on Major, Complex and High-Risk Incidents.

Patients in Cardiac Arrest

- 7.26 Resuscitation guidance that had been issued included a clear structured approach to balance the patients' clinical requirements for the speed of care delivery with staff protection requirements and the use of PPE. The UK Resuscitation Council and National IPC cell for Covid-19 did not agree on definitions of AGPs and the difference in position made guidance more complex with the UK Resuscitation Council reporting intubation was an AGP, and the National IPC cell reported it was not.
- 7.27 Understandably, this created some concerns from our staff. In order to meet the gap, YAS defined a guidance document [NS/09 – INQ000269159] Aerosol generating procedures and PPE. This provided a summary of procedures which were considered aerosol generating and those which were not, based on the latest evidence and national guidance. The alert published on 25 April 2020 [NS/10 – INQ000269160]

instructed clinicians that they should approach the patient in level 2 PPE and conduct an initial assessment and provide care which did not entail any aerosol generating procedures. Subsequent clinicians should don level 3 PPE prior to contacting the patient where aerosol generating procedures were likely to be required. A summary of level 2 and level 3 PPE requirements was also included in the alert. This guidance allowed staff to arrive at the resuscitation in level 2 PPE, to begin assessment and the ABC process, while the other crew member donned level 3 PPE. When the second crew member returned, they began the compressions, while the first staff member got into their PPE, and returned to sustain the CPR process with the second crew member, both at that time in level 3 PPE. PPE guidance changed very little over the Covid-19 pandemic period, however there was new learning issued from case reviews, which was helpful. A document was published from Public Health England outlining strategies for optimising supply of PPE and considerations for the use of PPE when in short supply [NS/14 – INQ000269164].

7.28 A clinical alert was published on the 14 March 2020 [NS/12 – INQ000269162], it reminded clinicians about the case definition, that most people that contract Covid-19 infection would only experience relatively mild signs and symptoms. However, in more severe cases infection cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. The clinical alert reconfirmed the PPE required to be worn and updated the guidance for clinicians attending category one incidents. The guidance recommended that the clinician who attended should enter the patient location wearing an apron, surgical mask and gloves (level 2 PPE) and they could make a rapid assessment of the patient. If the patient was in cardiac arrest, then the attending clinician should expose the patient's chest, apply the defibrillator pads and provide a DC shock if required. They should only provide chest compression only CPR. The second clinician should return to the vehicle don level 3 PPE and take over from the first clinician, who could then don level 3 PPE. When both ambulance staff were in level 3 PPE then Advanced Life Support could commence. Further PPE guidance was provided for any High Consequence Infectious Disease (HCID) cases [NS/15 – INQ000269165]. Regular daily and weekly staff notices were published for any key developments in response to coronavirus. Examples of these updates during March and April 2020 are provided [NS/16 – INQ000269166, NS/17 – INQ000269167, NS/18 – INQ000269168 and NS/19 – 000269169].

7.29 A clinical alert was disseminated on the 25 April [NS/10 – INQ000269160], on the approach to category 1 calls and resuscitation. Chest compressions and defibrillation were not considered to be an AGP and that a minimum of level 2 PPE was required.

Level 3 PPE was required before performing Advanced Life Support. The requirement to reduce droplet spread included applying a fluid resistant facemask to the patient's mouth and nose during chest compressions. Changes were made to the instructions given by 999 call handlers to bystanders providing CPR to cover the patients mouth and nose with a cloth during chest compressions and provide compression-only CPR.

- 7.30 Joint guidance was issued on 22 June 2020, from the National Ambulance Service Medical Directors Group and the Royal College of Emergency Medicine and the cardiac arrest guidance was updated. The procedure stated that all cardiac arrest patients were to be treated as potential Covid-19 and described the handover process required at the Emergency Department. If ongoing resuscitation was considered futile then resuscitation may be stopped in the ambulance at the direction of the ED doctor who has clinical responsibility.

Covid-19 patients

- 7.31 At the beginning of the Covid-19 pandemic outbreak the Trust had a High Consequence Infectious Disease ["HCID"] Procedure in place which required a specialist response to patients with Covid-19. As the outbreak developed, the guidance evolved and the response to patients with Covid-19 became a standard operational response for all ambulance staff. In the absence of national screening tools for ambulance clinicians, YAS developed a YAS Covid-19 screening tool [NS/20 – INQ000269170]. That evolved rapidly following each change in case definition, publication of research and feedback with local health and social care partners.
- 7.32 YAS developed a YAS Covid-19 screening tool using the latest guidance from national bodies, emerging clinical evidence and local intelligence. The screening tool supported decisions to convey the patient to ED or keep the patient in the community. The screening tool evolved until it was superseded by the national screening tool. The screening tool was disseminated to frontline clinicians using the JRCALC app, briefing sessions and clinical alerts.
- 7.33 An operational alert was published on the 13 March 2020, which provided the new case definition of Covid-19, which did not include travel or contact history (new continuous cough or temperature 37.8 or more). The alert described two levels of PPE (aprons, gloves and a surgical mask vs a RPE hood, Tyvek suit and gloves). The alert described that if a patient meeting the case definition was conveyed to the emergency department, then a pre-alert must be made. The first decision support tool [NS/13 – INQ000269163] was published on the 14 March 2020 alongside a clinical alert 'Essential changes to practice as a result of the COVID-19 outbreak' [NS/12 –

INQ000269162]. The support tool was then updated on the 18 March 2020, with the updated case definition to include a new continuous cough.

- 7.34 A clinical alert was published on the 18 March 2020, it advised that ibuprofen and other anti-inflammatory medicines should not be administered to patients with suspected Covid-19. Following the Commission of Human Medicines review, that decision was reversed in a clinical alert published 27 April 2020, which stated that the lowest effective dose of ibuprofen should be used for the shortest duration necessary to control symptoms.
- 7.35 A clinical alert was published on the 20 March 2020, it advised that due to the increased number of patients with Covid-19 being conveyed to the Emergency Department that a pre-alert was no longer required, and provided instructions for handing over patients at the ED.
- 7.36 A clinical alert entitled “Responding to emergencies during Covid-19 Outbreak” was published on 27 March 2020, and instructed staff that “all staff must be prepared to respond to patients with Covid-19 status suspected and confirmed”.
- 7.37 On the 28 April 2020, the Covid-19 Decision Support Tool was reviewed, updated with the National Ambulance Service Medical Directors [“NASMeD”] guidelines on managing Covid-19, updated case definition and further information on the 40-step desaturation test.
- 7.38 A clinical alert was published on the 18 May 2020, that updated the case definition to acute respiratory distress syndrome or high temperature or new onset continuous cough or a loss of, change in, normal sense of taste or smell. The Covid-19 Decision Support Tool was updated to reflect the updated case definition.
- 7.39 A clinical alert published on 3 July 2020 reminded staff not to transport patients, relatives or members of the public in rapid response vehicles.
- 7.40 Following the publication of the PRIEST (Pandemic Respiratory Infection Emergency System Triage) study [NS/21 – INQ000269171] the Covid-19 decision support tool was approved for use and disseminated on 13 November 2020 [NS/22 – INQ000269172]. The score was not validated for pre-hospital triage but was encouraged to be used to better understand the risk to patients when considering non-conveyance. A reminder was sent out on the 16 November 2020 which notified that the PRIEST COVID Severity Score was only intended to support shared decision making and not as a triage tool.

- 7.41 The prehospital PRIEST study used routine data from telephone triage contacts, emergency ambulance calls, and ambulance patient report forms relating to cases contacting the Yorkshire Ambulance Service with suspected COVID-19 during the first wave of the pandemic. These data were linked to Office for National Statistics death registration data, NHS Digital hospital and general practice electronic health care data to determine whether patients had died or received major organ support by 20 days after their initial ambulance service contact. Prehospital PRIEST aimed to evaluate the accuracy of existing triage scores or rules, the new score developed in ED PRIEST, and decision-making during the pandemic, in terms of whether patients were provided with an urgent response or transport to a hospital.
- 7.42 A clinical alert was published on the 13 December 2020, updating the case definition (a high temperature and/or a new continuous cough and/or a change in your sense of smell or taste) and encouraged staff to wear level 2 PPE and escalate to level 3 PPE where aerosol generating procedures were anticipated. The alert recommended that a pre-alert to hospitals for patients meeting the case definition was not required.
- 7.43 The Covid-19 Decision Support Tool was updated on 19 May 2021 [NS/23 – INQ000269173] and included BAME as a high-risk patient group. The alert also included a reference to the New England Journal of Medicine on the increased risk of undetected hypoxaemia in black patients.
- 7.44 The Covid-19 decision support tool was updated on 20 January 2022 [NS/24 – INQ000269174] based on new learning nationally and considers the presenting physiology, high risk patient group and red flag symptoms, the tool classifies patients as red, amber or green. In addition, as part of a national initiative YAS rolled out home pulse oximeters for patients not conveyed to hospital and referral to hospital at home initiatives where they existed. The pulse oximeters could be left with any patient who had a green outcome but were in the high-risk group or in the amber outcome and had been referred to another healthcare professional.

Capacity

Ambulance Capacity

- 7.45 YAS experienced a significant increase in demand in the first few weeks of the Covid-19 pandemic. In response, to quickly expand capacity to manage the increase in demand and future demand, we took several actions to increase the capacity of the 999 service, IUC/111 service and the Non-Emergency Patient Transport Service.

7.46 To respond to the changing demand of 999, YAS took the decision to increase the number of frontline emergency ambulance crews as a priority. The number of frontline staff increased by 371 over the period, from 2676 to 3044. This was a 13.8% increase. The numbers increased gradually as staff were trained and released onto front line duties.

7.47 Many of those actions were taken as part of the Resource Escalation Action Plan ("REAP"). The actions taken included the following:

- Stopped non-critical secondments of staff, returning staff to operational duties;
- Cancelled all training for operational staff (except for training that would increase capacity);
- Re-deployed non-operational clinicians to frontline duties;
- Brought in military personnel to support operational crews;
- Used members of the Fire and Rescue Service ["FRS"] to support the driving of ambulances in support of the planned Nightingale Hospital model;
- Employed year-three Paramedic Science students early;
- Offered the option 'buy back' of annual leave to increase capacity;
- Significantly increased the use of Private Ambulance Service ["PAS"] crews;
- Utilised PTS crews to support low acuity 999 work;
- Implemented incentive payments for overtime shifts;
- Engaged with St John Ambulance to provide crews to support low acuity 999 work;
- Introduced General Practitioners into the Emergency Operations Centre ["EOC"] to increase the number of calls treated without the need to send an ambulance;
- Introduced vehicle cleaners at all emergency departments to increase the availability of emergency ambulances;
- Maximised fleet availability with de-commissioned vehicles and increased mobile mechanics and introduced remote triage video assessments within the EOC;
- Cancelled non-essential meetings;
- Redeployed non-operational Trade Union representatives with clinical skills to work on emergency ambulances.

999 Call Handling Capacity

7.48 During the pandemic, as a result of staff absences, the YAS 999 call handling performance was under significant pressure. That was specifically challenging during March and October 2020, February and July 2021 and January 2022.

7.49 In response to the significant pressure experienced around 999 call handling, a number of actions were taken. These included the following:

- Significantly increased the number of 999 call takers (known as Emergency Medical Dispatchers ["EMDs"]);
- Significant increase in the recruitment of additional EMDs. The implementation of incentive payments for overtime shifts;
- Redeployed front-line staff with EMD training back into the EOC;
- Designed and deployed a shortened call handling process for EMDs to reduce average call handling time resulting in increased call taking capacity;
- Trialled reducing the length of the EMD training course;
- The implementation of a Covid-safe call centre environment with the support and guidance from local Public Health England;
- The development and implementation of a national process for providing mutual support between ambulance services.

111 Handling Capacity

7.50 In the same way the 999-call taking capacity was impacted by the pandemic, our 111 service was also under significant pressure at various times of the pandemic. A number of actions were also taken to increase call handling capacity, these included:

- Additional recruitment of 111 Health Advisors;
- Implemented a Covid-safe environment with the support and guidance from local Public Health England;
- Contributed to the 111 national process with mutual support provided between 111 providers;
- Implemented incentive payments for overtime shifts during specific periods;
- Implemented alternative communication methods such as Covid Line to ensure patients received accurate advice.

7.51 Due to increased pressure on clinical triage, a decision was made on 26 March 2020, that included additional clinicians to be mobilised to NHS 111 to manage the clinical stack.

Non-Emergency Patient Transport Service (NEPTS) Capacity

- 7.52 During the reporting period the NEPTS operating model changed from supporting a multiple-patient occupancy service to single-patient occupancy for each journey. That significantly reduced our capacity. In addition, a further 15 minutes was allocated to each journey, which allowed a post-patient clean on each vehicle to be carried out.
- 7.53 Prior to the pandemic NEPTS relied heavily on volunteer car drivers. However, due to the age demographic of PTS volunteer drivers, available volunteer numbers significantly reduced when the government announced details of shielding. In response to that, YAS explored the “GoodSAM” scheme that was established to assist the NHS during the Covid-19 pandemic but unfortunately that showed little success.
- 7.54 Due to the reduction in volunteers, Private Ambulance Services [“PAS”] were significantly used during the reporting period. The traditional business model for YAS was 60% YAS / 40% private providers split. During the Covid-19 pandemic that was reversed. Based on demand forecasts supplied by the YAS Business Intelligence team, daily requests were made to private ambulance and taxi providers in an attempt to provide resource to support YAS with a great deal of success. Fortunately, there was limited impact upon the provision of private providers, mainly down to the age demographic of provider staff and the high degree of resilience they had in place to cover such eventualities. The age profile of our staff employed on NEPTS is generally older due to the planned nature of the work and the opportunity for part time working. This is generally higher than the age profile of staff working in other parts of the ambulance service, including private providers. However, no data is available from private providers of their age profile and this statement is based on experience and knowledge of private ambulance services.
- 7.55 Taxi providers in particular changed their routine methods of operation, an example of that is when they adapted taxis, with bulkheads/screens installed and vehicles operated outside of their normal geographic locations to provide support where most needed. A small number of taxi companies agreed to transport patients who had suspected or confirmed COVID-19 infection. Such vehicles were adapted with screens/bulkheads with enhanced levels of cleaning carried out.
- 7.56 As a result of national NHSE Guidance around NEPTS, YAS was required to co-ordinate all NEPTS activity across Yorkshire during the Covid-19 pandemic.

- 7.57 A number of organisations were contacted to offer support, either on a voluntary or payment basis. As a result of these organisations experiencing the same issues of minimal staff levels due to staff shielding, minimal support was provided. Only two local authorities were able to provide support to YAS, these were Leeds City Council who delivered patient journeys on YAS's behalf and Wakefield Council, who assisted with the movement of Personal Protective Equipment ["PPE"] to private providers. Additional support from an electrical installation company offered the use of their vehicles, which YAS staff used to deliver PPE to partner providers.
- 7.58 YAS also took several additional actions to improve our response offered to our patients. These included the following:
- the use of NEPTS crews to support the introduction of an Integrated Transport Service to ensure best use of resource across PTS and Accident and Emergency;
 - Training of some Community First Responders ["CFRs"] to drive PTS vehicles;

Our Workforce

- 8 Maintaining the health and welfare of the Trust's workforce during the pandemic was, and continues to be, a top priority for the Trust.

Pre-pandemic Support

- 8.1 Prior to the pandemic YAS had a standard health and wellbeing offering for staff, that included occupational health services, Employee Assistance Programme (counselling), physiotherapy services as well as an in-house Health and Wellbeing team (2 whole time equivalents). However, as the Covid-19 pandemic began it was clear that a different level of support was required, and different support was required to meet individual circumstances.

Working from Home

- 8.2 On the 23 March 2020, YAS took a decision that all office-based staff, who did not need to be in the office, should work from home wherever possible. Staff were provided with the option of IT equipment, including laptops, mobile phones, chairs and screens. All these staff, approximately 600 members, were asked to work at home in order to protect those staff who were required to continue attending offices. To support these staff, the following was introduced:

- Home working guidance on a dedicated intranet page for staff and managers;
- Microsoft Teams was installed on every computer to ensure normal business could continue, as well as ensuring that colleagues could engage with each other, particularly colleagues who lived alone or were particularly vulnerable;
- Virtual desktop; this enabled staff who couldn't be supplied with Trust equipment (due to the demand and shortage), to have their personal equipment enabled and ensured a reliable internet connection at the Trust expense;
- Self-Care Guide including guidance on psychological wellbeing i.e., Getting dressed. Establishing boundaries. Getting out of the house (if not self-isolating). Picking up the phone/teams and talking to colleagues and not just messages or emails. Taking regular breaks from screens;
- Display Screen Equipment assessments. All colleagues working at home were mandated to undertake a DSE assessment on their workspace, a facility provided by ESR;
- Advice was given around Information Governance and securing Trust information and equipment. All colleagues were asked to ensure they were up to date with their statutory and mandatory training;
- Engagement sessions for remote workers were arranged on MS Teams as a support mechanism. Staff were able to explain coping strategies to be able to support others or simply socialise.

8.3 In April 2021, all 713 staff working at home received £150 (gross) a contribution for them to use on utilities, furniture and other equipment to support them working at home.

8.4 On release of guidance from NHS England on 16 March 2020, the Trust developed a series of eight action cards which represented a risk-assessments for staff to work through with their line manager.

8.5 The action cards resulted in 294 members of staff shielding, and 17 members of staff shielding due to family members being at risk. Given those staff were usually very active and, on the frontline, YAS quickly understood they would need support to ensure they kept mentally/psychologically well. Therefore, these staff all completed a skills assessment through the Corporate Cell to establish if they had transferable skills to complete tasks/roles from home.

- 8.6 Engagement sessions to support managers with shielding also took place on 17 June and 27 July 2020 and in April 2021 the Trust created a Road Map to Return [NS/25 – INQ000269175]; a guide to support shielding staff returning to the work environment.
- 8.7 The guide was designed to enable managers to have compassionate discussions whilst working through a generic risk-based action card to highlight individual risks for the member of staff outside those that exist for all staff during that time. The Trust were conscious of the extended period of time that shielding staff were away from work, the anxiety they had entering back into society generally, but returning to frontline duties, which presents its own risks outside of a pandemic, hence we wanted to ensure they all to return safely (physically and psychologically). The action card included the following sections:- Emotional safety & Wellbeing, Individual risk review, understanding workplace risks, if alternative duties were appropriate, training requirements, Scheduling back into shifts, day 1 orientation and regular check-ins.

Staff Mental Health

- 8.8 The Covid-19 pandemic was a situation that no individual had ever experienced previously and being separated from loved ones, colleagues, friends and their normal lives, hence the Trust was conscious of the impact that it would have on mental health. To support our staff in their mental health YAS took the following actions:
- Increased staff support via occupational health and the employee assistance programme. These became telephone and online appointments;
 - The YAS Health & Wellbeing team released a series of newsletters to inform of the support available to staff. A special mental health edition was published on 28 April 2020;
 - Optima provided a series of wellbeing workshops for staff to drop in for support. A psychologist was engaged to lead these sessions;
 - Staff had access to Resilience Hubs providing counselling and wellbeing support provided by local ICS resilience hubs for YAS staff and volunteers;
 - A dedicated trauma support line was launched in April 2020. This provided staff with additional help to deal with the emotional shock following an isolated event or several emotive and stressful dealings. These could have been events inside or outside of work;
 - Signposting to various support groups.

- 8.9 Other initiatives introduced to support staff welfare included a telephone helpline for staff questions about working during the pandemic, which was available 24/7 where staff could leave messages for a call back.

Financial Wellbeing of Staff

- 8.10 The Trust was aware of families during the reporting period who were struggling where their partners were out of work due to the Covid-19 pandemic. The Trust produced newsletters and guidance, which signposted staff to support. In addition, the YAS Charity offered staff support with grants of up to £250 available to provide short-notice financial help to staff and volunteers who were in crisis or experiencing hardship. The Ambulance Staff Charity (TASC) also offered support to staff providing longer-term financial support for current and former ambulance staff struggling with their mental, physical or financial wellbeing.

Staff with Vulnerable Family Members

- 8.11 The Trust had a number of staff who felt they needed to shield due to having highly vulnerable family members at home. From the 24 March 2020, the Trust paid for hotel accommodation for as long as they required it. This could either be because they needed to isolate as they had been infected with Covid-19 and could not return home or because they felt if they did contract Covid-19, that they would put their family members at risk. The staff members had access to:

- £25 per day to claim for expenses as hotels did not provide meals;
- Ability to claim for laundry;
- Provision of toiletries, food packs, towels;
- Provision of cleaning packs for their hotel rooms, where hotels refused to clean rooms for fear of contracting Covid-19 from surfaces.

- 8.12 The Trust arranged via central arrangements for 84 staff to stay in hotel accommodation. The average stay was around 6 – 8 weeks with some staff staying for longer periods (15 -20 weeks). The average hotel cost - £60 per night/ bed and breakfast. Estimated total cost £222,000.

Vulnerable Staff Groups

- 8.13 Following the release of national data that indicated that those individuals from ethnic minorities were disproportionately affected by Covid-19, YAS introduced some guidance and action cards to specifically support BAME staff. The action cards were a self-assessment as well as guidance on how to stay well. YAS contacted our Black

and Minority Ethnic colleagues with a direct letter (over 300 staff) to set out the support that was available to available to them. Those members of staff were encouraged to talk to their managers about their personal circumstances. An action card and guidance were available on Pulse to support these discussions.

8.14 YAS also introduced BAME specific engagement sessions, which were led by BAME clinicians. The sessions were aimed at staff who were anxious or who felt isolated because of the lockdowns. Sessions took place between May 2020 and February 2021.

8.15 We undertook engagement sessions, so staff felt fully supported. This was because some staff were isolating and away from family, friends and colleagues. The engagement sessions were effectively a support group. Our Diversity Advisor attended all the sessions as a facilitator. We don't hold formal records of the sessions, but the number of attendees ranged from around 6 to 22 staff. Each session started with a general check-in and then an update of support and wellbeing available to staff, research and updates from NHS England including IPC or health inequalities.

8.16 An example of the issues discussed included:

- Isolation from family and friends due to places of worship or community centres, and cafes were closed.
- Many families had multi-generational households, some who were in professions or organisations deemed to be essential workers so were potentially bringing the virus into homes.
- Concerns on food supplies and not being able to get deliveries, even though they were vulnerable.
- Concerns that the trust risk assessments being carried out were singling them out, rather supporting. As a result, we changed our approach after that and did a risk assessment on demand.
- Discussions when advice was issued about isolating staff and vitamin D deficiencies and how this appeared to impact BAME staff worse than others, hence encouraging staff to exercise outside in open spaces.
- Fear of returning to work and exposure to the virus
- Concerns about the fitting of the masks for people with beards and the dread of having to shave them when they returned.

8.17 BME and Disability staff networks introduced weekly on-line drop-in sessions to support staff who were working at home, isolating, shielding or in quarantine. The sessions were well-attended and aimed to ensure staff had support and could be signposted where required.

Long Term Impact on Staff

8.18 When YAS became aware of the long-term effects of Covid-19, it was identified that several staff had symptoms of Covid-19 for over 12 weeks. Action was then taken to signpost staff to support and help for their symptoms which included the following:

- Access to online rehab services;
- Access to health and wellbeing offer, including mental health and wellbeing hubs, apps and helplines for all NHS staff can be accessed via england.nhs.uk/people;
- Access to 38 system-wide staff mental health and wellbeing hubs providing rapid clinical assessment and supported onward referral to mental health services and psychological support where needed;
- Access to 89 Post-COVID Assessment Clinics by their GP;
- Appointment of a Trust Wellbeing Guardian. Jeremy Pease (NED) as our health and wellbeing lead.

Covid-19 PCR Testing for our staff

8.19 Covid-19 PCR testing was provided to staff via the national test and trace stations. There were occasions when staff reported delays in access to PCR testing, but those issues were not found to be widespread, and flow was routinely improved the following day. At times when an influx of cases was reported across communities, the demand for PCR testing via YAS staff was increased.

8.20 As the Covid-19 pandemic progressed guidance on YAS's test and trace Standard Operating Procedure and Process for contact tracing was provided to staff via various communication routes. The Standard Operating Procedure was in accordance with national guidance provided by Public Health England at that time, with any changes to national guidance communicated to staff and line managers and the Standard Operating Procedure updated accordingly.

8.21 During one significant outbreak within the 999-call handling area within EOC (Wakefield) it was agreed to PCR test staff who were negative for any symptoms. That

decision was agreed as part of the outbreak control groups actions and supported by Public Health England and included staff testing, for an identified selection of staff who were in an implicated shift pattern group via a complex contact tracing process. That process was supported via a mobile testing collection unit in the car park at YAS Headquarters with tests processed at local pathology labs such as Mid Yorkshire Hospitals NHS Trust. Minutes of outbreak control and decision taken regarding the Standard Operating Procedure for test and trace were taken.

8.22 Despite Covid Safe measures being in place within the Emergency Operations Centre there was a significant outbreak during October 2020. The peak of the outbreak was between the 6th and the 15th of October where the numbers of staff off work due to Covid (Symptomatic and Isolation) exceeded 120 staff out of a workforce of just over 500 YAS. There were further, but smaller peaks in Covid absence in July 2021 and January 2022.

8.23 The lack of PCR Covid-19 tests was not a huge factor in ongoing staff absence and overall sickness rates. At the start of the reporting period there was no PCR testing available and at that time we relied on symptom tracking, with staff staying away if they experience any symptoms. Once PCR testing became available, there were occasions when staff were delayed by hours before gaining access to testing, but in the main PCR testing flows worked well at the national Test and Trace centres in Yorkshire. Most staff who presented with symptoms at that time, needed tests undertaken before they returned to work. This gave me confidence to follow the symptoms and ask those who had any of the listed symptoms to stay at home until their PCR could be undertaken.

Covid Vaccination Process for our Staff

8.24 The Covid-19 vaccination programme at YAS started on 11 January 2021 and by 27 January 2021, 3,758 patient-facing staff had been vaccinated and a reserve list was in place to reduce any potential vaccination wastage.

8.25 The total number of staff employed by YAS in January 2021 who were on payroll was 6400. The total number of staff including volunteers was 7043.

8.26 The reasons behind the poor uptake from BME staff was found to be that a proportion was unable to have the vaccine as a result of them testing positive for Covid-19, and they waited 28 days before the vaccine was received. On 23 April 2020, the Board discussed the impact of Covid-19 on the BME community. As stated above an

assessment of staff absence at that time was undertaken and work to place with the BME Group to discuss and understand any further action required by the Trust.

Infection Protection and Control

9 Infection Prevention and Control during the reporting period included the following:

- 9.1 When the Trust was initially notified of the Covid-19 pandemic virus by local Public Health England colleagues a clinical alert was communicated to staff, which asked them to follow the High Consequence Infectious Disease ["HCID"] Protocol, which required transport by the YAS Hazardous Area Response Team ["HART"] for any suspected cases.
- 9.2 The HCID was found to be a useful document, with YAS one of the first ambulance services in the country to transport suspected Covid-19 positive patients from a hotel in the York area to the Newcastle Infectious Disease Centre. Infection Prevention and Control guidance was further developed in YAS in accordance with national guidance as more information about the pathogen was obtained and the situation developed. YAS's IPC team worked with other IPC teams in the sector to ensure all national guidance was interpreted for the ambulance sector environment, via the National IPC Group, which is a subsidiary of Association of Ambulance Chief Executive ["AACE"].
- 9.3 The national IPC Group for the ambulance sector, which YAS worked with throughout the Covid-19 pandemic period, was connected to the national NHS England Information Prevention Control Cell. Learning from this group was shared throughout the Covid-19 pandemic.
- 9.4 Prior to the reporting period, YAS used the loose-fitting RPE hoods, which were in place prior to the onset of the Covid-19 pandemic. Others were influenced by YAS, and the decision it had made to swap at wholesale to RPE loose-fitting provision with the need for arduous fit testing removed.
- 9.5 Guidance during the Covid-19 pandemic was provided by the UKHSA (formally PHE). They first published guidance on the 21 February 2020 and the last update was the 30 November 2021 with a title change to reflect IPC advice for seasonal respiratory infections including Covid-19. The updates were as follows:
 - 21 February 2020 First published;
 - 25 February 2020 Added guidance for donning and doffing personal protective equipment;

- 10 March 2020 Updated guidance including a summary table for PPE;
- 13 March 2020 Updated guidance including a summary table for PPE;
- 3 April 2020 Updated with detail on case definitions, clarification of AGs and updates to PPE;
- 11 April 2020 Updates to aerosol generating procedures, PPE and cardiac arrest;
- 14 May 2020 Clarification of conveyance and the use of aviation for transfer of Covid-19 patients;
- 18 May 2020 Updated information on possible case definition;
- 21 January 2021 Guidance updated to acknowledge Covid-19 care pathways for staff;
- 29 January 2021 Amended distance from 2 metres to one metre and inclusion of recommended good practice precautions in the event of delayed hospital handovers;
- 19 July 2021 Reviewed and updated in line with changes in Step 4 of the UK roadmap;
- 25 November 2021: Broadened guidance to include seasonal respiratory infections.

9.6 Ambulance trusts were continually updated by AACE, via the national IPC group, on changes to national guidance and the application of those in the sector. YAS continually updated the Standard Operating Procedure for the test and trace process in line with new guidance from IPC cell and NHS England and the PHE. For overarching Infection Prevention Control guidance, there was standard precautions in place in line with the Trust's Infection Prevention Control Policy, national guidance and the adoption of the new national Infection Prevention Control manual for use in the Trust. Communication to staff was extensive, which included leaflets and Z-cards to assist staff to understand the appropriate application of IPC practice.

9.7 The Infection Prevention and Control process for ambulance vehicles included adherence to the Decontamination of Medical Devices and Vehicle Procedure and the Decontamination of Medical Devices Standard Operating Model. There was an increased focus between patient cleans with agency staff cleaning teams located at emergency departments. That allowed staff to safely remove their PPE and enabled time to have refreshments. This also ensured that vehicles were cleaned to the highest of standards between patients. All cleaning staff were required to wear level 2 PPE. Vehicles used for the care of known or suspected Covid-19 patients, where Aerosol Generating Procedures ["AGP"] had taken place in the back of the vehicle,

had an enhanced clean carried out with the use of a fogging system and full back ventilation. For that procedure cleaning staff wore full level 3 PPE. Staff that were new to the cleaning teams were required to complete relevant training in cleaning and donning and doffing PPE.

Covid Safe Estate

- 9.8 Risk assessments of all ambulance stations were undertaken, that included office spaces and contact centres in line with newly released guidance “Working Safely During Covid-19”. Guidance covered the number of staff present, space required between members of staff in any one room or office space, the number of spaces available for staff to take breaks, one way entry and exit systems, when to wear a face mask and the provision of screens for desk areas, with two metres spacing wherever possible. All risk assessments were stored on the Trust’s shared internal system and were repeated at relevant intervals through the reporting period. Non-patient facing staff, such as corporate support services were asked to work from home as soon as possible at the start of the Covid-19 pandemic to reduce the footfall into the building, which reduced the risk of onward transmission to patient-facing staff, such as those in the call-centres.
- 9.9 Despite significant mitigation being in place, in October 2020 there was a significant Covid-19 outbreak within the Wakefield EOC. Outbreak control group meetings were established and further measures to control transmission were put in place. Following the increase of Covid-19 absences and risk to contact centre employees, additional risk assessments were undertaken. Options were discussed in depth at TEG meetings with options to utilise other premises agreed to ensure a full 2 metres space could be in place in contact centres.
- 9.10 Over the remaining reporting period outbreaks across various stations and call centres were experienced. All significant outbreaks were managed and reported into the Outbreak Control Group, Chaired by the Director of Infection Prevention and Control.
- 9.11 On 26 November 2020, an update paper was provided to the Board to provide assurance on the Working Safely in Trust Contact Centres, ambulance stations and other Trust office buildings. Clear recommendations and improvements to the estate were suggested and approved.

Personal Protective Equipment (PPE)

- 9.12 Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) policies and guidance were strictly followed during the pandemic. The PPE included,

but was not limited to, 3M Respiratory Protective Equipment (v.6); Level 2 PPE; Level 3 PPE eye protection and Level 3 PPE powered respirator hood.

- 9.13 The levels of PPE stock on the 23 March 2020, reported national challenges but YAS had been in a good position and had provided level 2 and level 3 PPE wherever required. It was identified that the use of Reusable Protective Equipment hoods had been promoted rather than face masks due to the ease of use and the improved level of protection.
- 9.14 In the 12 months to 31 March 2020, the Trust procured 58,000 face visors (a mask and visor combination), 323,000 aprons and 10 million gloves. Procurement and logistics operated on the basis of 14 days of stock held on individual stations. Due to the limited stockholding facilities, YAS also operated on a 'just-in-time' basis. As the impact of the pandemic increased and there was a need to increase the stockholding position, the estate at Bentley, Castleford and Thirsk was utilised and a short-term lease of a large warehouse in Wakefield was secured with further improvements made to the Trust's logistical operations.
- 9.15 Prior to the Covid-19 pandemic YAS had completed the rollout of RPE units and hoods onto all its emergency vehicles. Each vehicle contained reusable hoods and given the increased usage, it was agreed to issue personal issue hoods (which, followed complaints on the condition of the hoods). Due to supply and demand challenges the roll-out of personal issue hoods started in June 2020.
- 9.16 The roll-out of RPE units and hoods limited the need for FFP3 masks that were used for Level 3 PPE and stock was limited to support students or staff unable to wear hoods.
- 9.17 YAS mirrored the arrangements in place at other NHS organisations with additional supplies ordered when existing supplies were exhausted. YAS relied heavily upon National Disruption stock to be supplied for a range of products including IIR masks, aprons (16 micron), latex free gloves, eyewear and hand sanitiser.
- 9.18 The Logistics team was available 24 hours, 7 days each week to receive stock from the National Disruption stockist and received deliveries on a regular basis outside of the standard hours from both the military and NHS Supply Chain. In addition, the Trust worked with local partners to secure and supply mutual aid. The mutual aid partners included West Yorkshire Alliance of Acute Trusts and Working Together Partnership (South Yorkshire Trusts).

9.19 We also sourced and procured our own stock to support the welfare of staff, which included RPE hoods, coveralls and eyewear, which were obtained direct from suppliers. In the absence of combined visors and masks historically used by YAS, reusable eyewear was procured by and issued to all front-line emergency staff in the early stages of the Covid-19 pandemic. YAS engaged with other ambulance sector trusts on a regular basis to share best practice and to address common challenges. A large amount of offers for supplies of PPE from local companies was received, some of which were utilised, others were declined due to limited assurance on Infection Protection and Control.

9.20 Some of the stock sourced directly by YAS included:

- Personal issue goggles issued. An additional 1000 replacement goggles at a cost of £4,730.
- 5800 personal RPE Hoods issued at a cost of £232,500 over a two-year period.
- Additional coveralls (Tyvek suits) procured due to shortages in national disruption stock. Approx. 40,000 items procured (due to initial uncertainty on usage levels for level 3 PPE) at a cost of approx. £200,000. We were advised at the time by NHS Supply Chain to approach 3rd party suppliers directly.
- Hand Sanitiser – range of sizes incl. refills approx. 1000 items at a cost of £30,000

9.21 In March 2020, there were significant challenges in obtaining PPE (including hand sanitisers) from both suppliers including the NHS Supply Chain and via the National Disruption stock. Deliveries were not always reliable at that time and often arrived late or occasionally not at all. The distribution of National Disruption stock in the early stages of the pandemic operated on the basis of Trusts having 48 hours of stock to operate. Where Trusts could demonstrate they had those levels they were not prioritised for emergency deliveries. Whilst that was an acceptable level for acute trusts, where the onward distribution of stock required the transfer of stock from the 'goods in' area of a hospital to wards on the same site, ambulance sector trusts had additional logistical challenges. For instance, in YAS resilience stock would be received in a central storage facility and would then be distributed to upwards of 70 sites located across the region of Yorkshire, for further distribution to Trust emergency and PTS vehicles. That was a logistical challenge to visit all sites in a 48-hour period to top up stock levels due to the number of logistics staff and vehicles in operation.

- 9.22 Despite numerous calls and discussions with national and regional teams, it was never recognised as a unique challenge or subsequently addressed. As the supply and distribution of PPE through the National Disruption Stock improved, the levels of resilience increased. That was supported by the introduction of the National Foundry Push System with daily reporting of stock levels (and subsequent delivery of national stock). The establishment of a regional storage facility at Harrogate County Showground (operated by Leeds Teaching Hospitals NHS Trust on behalf of West Yorkshire Alliance of Acute Trusts) and Sheffield Arena (operated by Sheffield Teaching Hospitals NHS Foundation Trust on behalf of the Working Together Partnership) facilitated mutual aid across the region. At no stage did YAS run out of PPE for staff, although in the early weeks of the Covid-19 pandemic there was low numbers of PPE. Covid-19 SITREP reports noted the stock levels over the reporting period. Examples of these SITREP reports are shown for 30 March 2020 [NS/27 – INQ000269177], 17 April 2020 [NS/29 – INQ000269179], 01 May 2020 [NS/30 – INQ000269180], 24 March 2021 [NS/26 – INQ000269176] and 14 April 2021 [NS/28 – INQ000269178].
- 9.23 We have no written evidence available around this as this was a very short-term challenge whilst additional stock was sourced both nationally and by YAS. The challenge was raised on calls on several occasions with national teams with the suggestion that additional stock (no more than an additional 24/48 hours of stock) would be required to better support the distribution of stock to all sites. Discussions regionally and more locally as part of mutual aid discussions had more success and often led to stock been provided to the trust by other trusts in the region.
- 9.24 Initial situational reports provided short narrative on stock position on key items of PPE and Medical Gas. Shortly afterwards (mid-April 2020), the Sit Rep included a table detailing the stock position including daily usage rates for all key PPE. It continued to flag items for escalation.
- 9.25 Product recalls proved problematic and a constant cause for concern which, outside of quarantining products, were never fully resolved due to stock levels held and the need to distribute to circa 70 sites and over 500 emergency vehicles. Any product recall encountered was communicated on the Daily Strategic call and followed through with emergency communications to all staff to remove from vehicles. Trust logistics staff were tasked with visiting storage rooms at all stations and removing stock.

- 9.26 In terms of face masks, aprons and gloves continued to be distributed to stations to allow vehicles to be replenished with PPE at the station. As previously mentioned, the roll out of RPE Units on emergency vehicles limited the need for single use FFP3 masks. Prior to the wider availability of coveralls, the supply of long-sleeved aprons was utilised. However, when they became limited in availability, supply of 'sleeves' was identified to be used with sleeveless aprons.
- 9.27 In March 2020, YAS was unable to secure the supply of combined face masks and visors that had been issued historically. Single use visors were made available, but because of the logistical challenges faced to obtain and distribute visors to circa 70 sites, the Trust supported the distribution of personal issue reusable eyewear (goggles) for all patient facing emergency staff. Further options were provided to staff during the relevant period as and when staff raised concerns with goggles slipping. Additional single-use visors were made available to PTS staff and supplied daily.
- 9.28 In March 2020, individual 50ml hand sanitisers were issued to patient-facing staff, but the stock was limited and was one of the biggest challenges experienced in terms of PPE. As larger containers of hand sanitisers were available to be sourced, the Logistics team set up 'refill stations' at a number of centrally located stations across the region, which allowed staff to refill empty individual sanitiser bottles and resulted in the challenge being resolved. Face-masks, wall-mounted hand sanitisers and IPC approved surface wipes were procured and supplied to call centre staff, which previously had not been required.
- 9.29 There were various amounts of guidance documents issued to staff over the entire period to support the safe use of PPE to ensure staff were able to undertake a dynamic risk assessment and select the appropriate level of PPE for the patient and tasks required, and to ensure that they were able to don and doff the PPE safely, which included the use of the respiratory protection equipment. The RPE hood used at YAS was a loose-fitting system and did not require fit testing. However, it was important to issue clear guidance on how to correctly wear, use and remove the system and a short video was produced and available on the Trust's intranet. Compliance with RPE hood training throughout the pandemic was consistently over 90%. Level 2 PPE included face masks and eye wear, both of which was a challenge for people who wore glasses, with fogging a common reported issue. Guidance was issued and feedback from staff was collected with adjustments made to the PPE offer for eye wear, but it remained a difficult issue to fully resolve.

- 9.30 Regular feedback on the quality of PPE was provided to the Trust's Procurement Group and feedback obtained from staff-side colleagues and operational staff from the daily Covid-19 Strategic call was established from March 2020. Regular feedback highlighted concern on the adequacy of aprons issued to emergency patient facing staff, with those staff often operating outside finding the aprons would often blow around and not provide adequate protection. YAS worked closely with national colleagues to secure the supply and distribution of a thicker (35 micron as opposed to 16 micron) apron and those items were made readily available to the wider ambulance sector. Datix reports were also directed to the Procurement and Logistics Team when any reference to the failure of PPE was recorded, which was followed up with National Disruption stock central teams.
- 9.31 National Disruption stock and later Push stock was procured by a national team, which identified sources of supply. No further testing was carried out upon receipt and there was a reliance on those products to meet national specification standards of safety. Following a number of product recalls, the Trust's Logistics Team, in consultation with its IPC Lead, agreed to quarantine products received (where possible and where stock levels allowed) from the National Disruption stock for a period of 48 hours before onward distribution. When the Trust secured products outside of National Disruption stock, checks were made by the Trust Procurement team to ensure that they met the national specification safety standards before a sample product was obtained. Samples were then checked by the Trust's IPC Lead before larger supplies were secured.
- 9.32 As stated earlier, the RPE hoods selected for use by YAS were loose fitting FFP3 protection systems and did not require fit testing to be carried out for staff. RPE hoods and units were selected by YAS as the most appropriate FFP3 system for the Trust during 2017-18. A full risk assessment of the kit was undertaken including ingress and egress, compatibility with other PPE, which included the helmet. YAS % compliance with fit testing of the FFP3 face mask system was consistently below 50%, a business case was prepared by the Head of Safety who was in post at that time to procure the RPE units for the Trust. That procurement process was undertaken in 2018-19, which resulted in the Trust being in a better position than some other NHS organisations to respond to PPE requirements at the outset of the Covid-19 pandemic. The benefits of a loose-fitting FFP3 system did not require fit testing or require those that used it to be cleanly shaven and it fit anyone, regardless of their size or shape of nose or chin. The RPE hood system was equitable and inclusive. YAS received a number of letters of thanks from people of different religions and race noting their ability to retain their beards because of our proactive approach. Some people with hearing difficulties had

struggled to use the loose fitting RPE systems due to the sound of the air flow. Those members of staff were fit tested and used the FFP3 masks and were provided with their own supply of the correctly fitted masks.

9.33 At the outset of the Covid-19 pandemic, RPE hoods were not issued to each member of staff until later. As a result of that some members of staff shared hoods, which were fully de-contaminated between uses. The lifespan of the hoods was shorted by such continual use and regular cleaning, which meant additional supplies had to be quickly sourced. Once the Trust had adequate supplies, one hood per each member of staff was provided.

9.34 Delivery of Hoods to each station took place 17-19 June 2020 for collection by staff.

Quality and Safety

10 Arrangements in place for Quality and Safety included the following:

10.1 All moderate and above incidents were reviewed via the Trust's Incident Review Group and reported via STEIS where they met the NHS England Serious Incident framework criteria. Investigations proceeded in line with the Investigations and Learning Policy with Serious Incident reports completed and reported to Commissioners, and a Covid-19 learning report was completed [NS/31 – INQ000269181] following the first wave of the Covid-19 pandemic.

10.2 There were 1217 moderate and above incidents reviewed at the Incident Review Group over the relevant period. On review of the themes of these incidents the majority related to Excessive response times due to Increase Demand on the service. Other incidents discussed were relating to delays in clinical call backs due to the increased demand also.

10.3 Following discussion with Integrated Care Board colleagues, a detailed document was produced to go alongside individual learning reports for submission under the serious incident framework during the covid period' Learning related to the corporate document was aligned to the Board Assurance Framework.

10.4 The Trust's reflections on the response to the Covid-19 pandemic, included what worked well, any difficulties or challenges and what changes should be made in the future, which were provided within Covid-19 communication de-briefs. The Trust's 2020/21 Annual Report and Accounts included a description of the Trust's response to Covid-19 pandemic and how the Trust fast-tracked digital technology to support virtual

meetings and clinical triage. The Pandemic Influenza Operating Framework documents future plans for resourcing and prioritising the response to any future pandemics.

National and Regional Key Decision Makers

11 To my best recollection the key national and regional decision-making groups during the reporting period included:

- AACE Chief Executive Group;
- AACE National Director of Operations Group (NDOG);
- AACE National HR Directors Group;
- AACE National Quality and Governance Group;
- National Ambulance Service Medical Director Group;
- Various Regional NHSE Group Meetings.

Funding

12 Funding during the reporting period included the following:

Financial Year 2019/2020 Top Up Process

12.1 For the period from March 2020, NHS England implemented a top-up system for organisations to claim retrospectively for additional funding to cover exceptional costs incurred in the response to the Covid-19 pandemic. The type of expenditure was carefully monitored; requiring Trusts to complete a detailed Covid-19 expenditure return. The Trust incurred £938,000 of Covid-19 related expenditure and received income to cover it via a retrospective process.

Financial Year 2020/2021

12.2 In the financial year 2020/2021, the NHS finance regime was changed, with the intention of streamlining bureaucracy, to simplify processes and the volume of transactions whilst improving cash flow; to thereby enable the maximum amount of resources to be diverted to managing the crisis.

12.3 The changed financial regime essentially moved YAS from a position where income was aligned to specific contracts for services, to one where a monthly block allocation was received from CCGs and NHSE. Invoicing was suspended, as were NHS efficiency programmes. Any developments that did not support the Covid-19 response were paused.

12.4 Whilst the processes underpinning those arrangements did effectively achieve a level of streamlining, to ensure the block allocation was correct was found to be difficult. The Finance Team identified issues and anomalies, which needed to be addressed and there was no formal route in place to do so. However, the matters were successfully concluded, and the 2020/2021 Financial Plan was approved by the Board in June 2020.

Financial Year 2021/2022

12.5 The temporary finance arrangements continued, originally into the first six months of 2021/22, but ultimately continued for the remainder of the year. That meant the Trust had to develop two financial plans in one year: which, was an onerous process for the finance team. Planning guidance was produced by NHS England, but the guidance did not specifically reference the ambulance sector and the Integrated Care System were slow to recognise the unique pressures placed on the ambulance service. Whilst negotiations for sufficient funding were eventually successful, they were protracted over several weeks. Both plans for H1 (April – September 2021) and H2 (October 2020-March 2021) were approved by the Board.

12.6 Notably during 2021/2022, additional system support was provided to the ambulance sector to achieve 5 key deliverables:

- Recruiting of 999 call handlers;
- Expanding capacity through additional crews on the road;
- Additional clinical support in control rooms;
- Extended hospital ambulance liaison officer (HALO) cover at most challenged acute trusts;
- Retention of emergency ambulances to increase the fleet for winter.

12.7 That was not supported by capital investment; the Trust uplifted its fleet by not decommissioning older vehicles when replacements arrived. The necessary infrastructure to support that and the increased call handling was funded by the Trust's internal capital allocation, at a cost of £900,000.

Financial Process and Governance

12.8 Within the resource provided during 2020/2021 and 2021/2022, the Trust continued with its established financial planning processes, with funding rolled forward, budgets adjusted for pay inflation, cost pressures, agreed investment and additional resource in relation to demand modelling, which forecast the required resource in all 3 of the Trust's services. Those plans were triangulated with workforce, activity and

performance plans and Trust Executive were kept apprised throughout regular meetings with plans approved by the Board. Budgets were set within the parameters of those plans, which were agreed with budget holders.

- 12.9 Throughout the Covid-19 pandemic period the usual financial governance arrangements applied in terms of budget holder responsibilities and the delegated financial approval limits applied. However, decision making was more fast paced than usual, which was facilitated through the regular meetings with Executives and monitored closely at an overall Trust level to ensure the Trust met its overall financial duties, with less concern for balanced budgets at a granular level. That approach aligned itself to the global sum arrangement, as income was no longer aligned to service contracts. The Executive Director of Finance led that process and ensured that Board colleagues were fully apprised throughout the reporting period.

Financial Year 2022/2023

- 12.10 In 2022/2023, the NHS reverted back to an annual planning process, but due to the implementation delay, the new contracting arrangements continued with a block income arrangement. The Trust found itself burdened by recurrent costs funded non recurrently, and a legacy of ambulance sector specific cost pressures. Through the planning process some issues were addressed with ambulance capacity funding provided to the sector recurrently, and with additional non recurrent funding reached agreement, ultimately producing a breakeven plan which was approved by Board.

Lessons Learned

- 13 The lessons learned during the Covid-19 pandemic included:

Senior Clinical Leadership

- 13.1 YAS quickly realised the importance of experienced senior clinical leaders within both IUC (111) and EOC (999). Once they were put in place it ensured safe and responsive advice was provided through effective clinical leadership.

Staff Engagement and Communication

- 13.2 Due to the fast pace of change in national guidance and advice at YAS, we found it essential to put in place a 'battle rhythm' of organisational communication. Whatever changed during the day, communication was released to ensure that a daily update was issued, even if it said, 'no further information'. In an organisation with 71 sites and staff working 24 hours, 7 days per week the continuous communication was essential. Weekly briefing sessions were then put in place for all managers and supervisors to

allow two-way communication and general non-time critical queries to be raised and answered.

- 13.3 The method by which staff received the daily update was through a staff notice; an electronic pdf document, which was attached to an email to every member of staff, as well as the body of the notice included in the email. The daily update was also published on the staff intranet, with a link to the notice included in the staff email.

Training

- 13.4 Decisions were undertaken at the start of the Covid-19 pandemic to stop all training unless it supported the introduction of new staff. The impact of that has been significant in the backlog of training and the impact on morale of staff.
- 13.5 The decision to halt all in-person training and placements was the right decision at the start of the COVID pandemic (March 2020 strategic decision to pause or cancel all learning programmes for a minimum of 90 days). A phased recovery plan commenced in July 2020 for core workforce development and prioritised programmes ensuring COVID-secure learning environments blended with live online learning. Some eLearning was used as alternatives to face-to-face training. Further disruption to the training provision throughout 2020/21 and 2021/22 was experienced due to extreme operational demand resulting from COVID. Core workforce development programmes and placement provision were protected. With hindsight, the recovery of all face-to-face training from eLearning alternatives (e.g., resuscitation, moving and handling, conflict resolution) could have happened sooner to avoid decreases in compliance rates. 2023/24 is year 2 of a three-year plan to recover compliance of these important skills.

Conveyance Decisions

- 13.6 For future learning, focus on 'best interest conversations for our patients' would be an area to consider for improvement following feedback from patient experience and the complaints process. Clinical staff need to consider those who can safely stay home with safety netting but have the confidence to attend emergency departments with those who require further assessment beyond that, which we can be provided, such as radiology examination and work with patients to enable patients to make supported decisions that are in their best interest. It should be noted that some patients were anxious about any hospital attendance during the peak of the Covid-19 pandemic.

13.7 It was reported by a number of frontline clinicians that their decision not to convey the patient was directly influenced by the patient's reluctance to be conveyed to hospital due to concerns regarding exposure to COVID-19.

PPE

13.8 The distribution of PPE in the early stages of the Covid-19 pandemic operated on the basis that Trusts required 48 hours of stock in place to operate. That was an acceptable level for acute trusts but for YAS, we noted logistical challenges. For example, when resilience stock was received in a central storage facility, it was then required to be distributed across 70 sites across the region of Yorkshire by YAS with further distribution to acute trust emergency departments and to PTS vehicles. Despite numerous discussions with national and regional teams, it was not acknowledged as a unique challenge for the ambulance sector and the concerns raised were not addressed.

13.9 YAS communicated and worked collaboratively including mutual aid agreements. A central coordination centre was established, and YAS communicated with NAA partners. Meetings were held with Northern Ambulance Alliance Trust Heads of Procurement (YAS, North West Ambulance Service NHS Trust and North East Ambulance Service NHS Trust), to discuss challenges, and common issues etc. Sharing of mutual aid occurred more with local NHS providers; one example of mutual aid shared and reciprocated with London Ambulance Service NHS Trust included coveralls issued to with IIR Facemasks received by YAS in return).

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: 20 September 2023