Witness Name: Paul Nicholson, Rosie Byrne, Lynne Charlton, Dr Nigel Ruddell.
Statement No: M3/NIAS/01
Exhibits: NIAS 001 - 014
Dated: 22 September 2023

UK COVID-19 INQUIRY

WITNESS STATEMENT OF NIAS

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1. I, Paul Nicholson, Rosie Byrne, Lynne Charlton and Dr Nigel Ruddell will say as follows in response to the matters to be addressed by the Rule 9 Request:

2. The Northern Ireland Ambulance Service (NIAS) exists to improve the health and well-being of the people of Northern Ireland. We apply the highest levels of knowledge and skill to preserve life, prevent deterioration and promote recovery. We touch lives at times of basic human need, when care and compassion are what matter most. NIAS provides high quality emergency, urgent and primary care services throughout the whole of Northern Ireland. Our dedicated, committed and highly skilled staff work 24 hours a day, 365 days a year to ensure that our patients receive the best possible care. The Northern Ireland Ambulance Service Trust (NIAS) operates under the following organisational structure:

   - Chief Executive's Office;
   - Operations Directorate;
   - Finance Directorate;
   - Human Resources Directorate;
   - Medical Directorate;
   - Quality, Safety & Improvement Directorate;
   - Planning, Performance and Corporate Services Directorate;
   - Clinical Response Model Programme Directorate; and

- Strategic Workforce Planning Programme Directorate.

3. Immediately prior to the Covid pandemic, NIAS had undergone organisational change at a senior level, with the establishment of two new Director posts and the realignment of functions across all Directorates. Below is an outline of the key functions within each Director's strategic remit following this realignment.

Director of Operations
- Operational Service Delivery
- Emergency Ambulance Control
- Non-Emergency Ambulance Control
- Patient Care Service

Medical Director
- Clinical Governance
- Clinical Education
- Emergency Planning
- Risk Management
- Community Resuscitation
- HEMS

Director of Planning, Performance & Corporate Services
- Planning
- Performance Management
- Corporate Services including Trust Board/Chief Executive's Office and Communications
- Risk Management
- ICT
- Information Governance
- Business Intelligence

Director of Quality, Safety & Improvement (and Director of IPC)
- Quality & Service Improvement, including SAI's, Complaints & Compliments, Patient Experience
- Co-Production including Patient & Public Involvement (PPI)
- Patient Safety
- Infection, Prevention & Control
- Safeguarding

Director of Finance, Procurement & Estates
- Financial Accounting
- Financial Management
- Audit
- Procurement
- Estates
- Fleet

Director of HR & Organisational Development

- Core HR Services
- Organisational Development
- Organisational Culture
- Employee Engagement
- Employee Health & Wellbeing
- Corporate Litigation

Corporate Equality, Good Relations & Rural Needs

4. The CRM Programme Director was a temporary role with a primary focus on the development of a significant business case for the additional workforce resources required for the implementation of the new Clinical Response Model (CRM).

5. The Strategic Workforce Planning Programme Director was a temporary role with a primary focus on the development of a 5-year organisation-wide workforce plan, with specific reference to the potential for significant additional workforce requirements as a consequence of CRM.

6. The structure did not change throughout the pandemic and the period covered by this statement (1 March 2020 and 28 June 2022).Throughout the period of the pandemic, the following the individuals were key decision-makers in relation to the provision of ambulance-related services for Northern Ireland.

    - Mr Michael Bloomfield, Chief Executive officer
    - Mr Paul Nicholson, Director of Finance Procurement Fleet and Estate
    - Mr Robert Sowney Director of Operations, replaced by Ms Rosie Byrne, Director of Operations
    - Mr Brian McNeill, Director – Clinical Response Model Programme Directorate
    - Ms Roisin O'Hara, Director – Strategic Workforce Planning Programme Directorate
    - Ms Maxine Paterson, Director of Planning, Performance and Corporate Services
    - Ms Michelle Lemon, Director of Human Resources and Organisational Development
    - Dr Nigel Ruddell, Medical Director
    - Ms Lynne Charlton, Director of Quality, Safety and Improvement and Director of Infection Prevention and Control (DIPC).

7. An Incident Management Team (IMT) chaired by the NIAS DIPC and with input from all Directors (or their representatives) was stood up on the 31.01.20. In relation to COVID-19. This Team provided direction for the service in relation to all aspects of the management of COVID-19 and to ensure and support continued operational service delivery.

8. In Mid-March 2020, it became clear that COVID-19 was going to require long term management. A NIAS Command and Control cell, utilising a bronze, silver, gold structure was stood up to provide 24/7 direction and support for the service in relation to all aspects of the management of COVID-19 and to oversee and ensure operational service delivery. This structure replaced the IMT.

9. NIAS participated in and contributed to a number of regional and ambulance related decision making structures during this time including, Health Gold, Health Silver, Port Health Group, National Ambulance Service IPC Group (NASIPCG AACE), Northern Ireland Public Health Agency (NI PHA) IPC Cell, NI PHA / BSO PPE Cell.

10. In terms of organisational oversight, the Senior Management Team (SMT) also held a teleconference every day at 09:30 hours, known as the 'Huddle'. In attendance were the Director of Operations, the 4 Assistant Directors of Operations, Senior Control Room Managers the 5 Area Managers, the NIAS Director of IPC or the NIAS IPC Lead, the Fleet Manager and representatives of the Resource Management Centre. In the first phase of the Coronavirus response, this huddle included key representatives from the COVID-19 functional cells above and from 30th of September 2020; these Functional Leads joined the Silver cell as members.

11. NIAS is an operationally focussed, frontline urgent and emergency care service. The pandemic and resulting public health restrictions/guidelines had a significant impact on the provision and operation of ambulance-related services by the Trust. NIAS was positioned to make decisions about the pandemic at different points in time through a range of expertise and support services that already existed within the organisation including the Human Resources team, the IPC Service, the Emergency Planning Service and the Risk Service.

12. Bespoke support functions that were directly stood up such as the IMT, the Gold/ Silver/ Bronze command, Operational Support room function, the COVID testing function and the Contact Tracing function also significantly contributed to this ability.

13. These services and functions provided a range of subject matter expertise, guidance and direction and critically also gathered intelligence on the operational impact of the situation, which further informed decision making.

14. Decision making on pandemic response was also informed through partnership working with the Department of Health (DOH), Public Health Agency (PHA), Association of Ambulance Chief Executives (AACE), and with other HSC Trusts.

15. Regional and national guidance on COVID-19, whilst initially rapidly changing, supported the service with decision making at all points in the pandemic.

16. The biggest challenge to decision making in relation to responding to the pandemic arose as a result of the dynamic nature of the evolving situation. The pace of the required change also proved challenging in terms of the demands that were placed on a relatively small senior decision making team and which then proved difficult to enact operationally as a result of NIAS being a regional, mobile, 'non-static' service.

17. Guidance produced by AACE and tailored for the ambulance context proved to be particularly supportive in this regard. NIAS contributed to the development of this AACE guidance. NIAS also contributed to the development of all NI IPC Guidance re COVID-19 through the NI IPC Lead Group and NI IPC Cell which feedback into UK PHE (UKHSA) IPC Guidance.

18. National and Regional decision makers with responsibility for ambulance-related services responded to the changing events during the relevant period through the following structures and process that were established, including:

- Civil Contingencies Group for Northern Ireland. (CCGNI)
- HSCB/PHA Health Silver meeting. Daily meeting to provide opportunity for escalation from NIAS to Health Silver and Departmental Gold as appropriate,

- COVID-19 Regional Surge Planning Group
- PHA IPC Cell
- PPE Cell
- National Ambulance Service Infection Prevention and Control Group (NASIPCG)
- National Ambulance Resilience Unit (NARU)
- National Ambulance Service Medical Directors Group (NASMeD)

19. Responses by these national and regional decision makers included:
    - - Meetings (telecalls/ videocalls/ more latterly Zoom or Teams calls)
    - - Production of guidance and resources
    - - Advocacy on behalf of Ambulance services at National groups, for example NASIPCG representation on PHE COVID-19 Cell
    - - Availability as points of contact for subject matter expertise or tailored response to Ambulance queries

20. These national and regional structures were important for both sharing and receiving information and guidance from other organisations in Northern Ireland and across the UK. Taking an example of the PHA IPC Cell the type of information shared included how NIAS staff were finding PPE that had been issued, for example masks, visors etc..at this group the other HSC Trusts and the Public Health Agency were able to share their experience of this also. This information sharing helped us to realise that there was variation in usability of some items of PPE. This then led to a process being developed with the Business Service Organisation (BSO) Procurement and Logistics (PaLs) to support with the bench top assessment of PPE items through the IPC Cell to help to ensure that PPE procured and provided was able to be used effectively in clinical settings. In relation to this example this process of feedback to national decision makers functioned effectively.

21. In relation to the resourcing of the Trust during the pandemic, the following individuals in NIAS were responsible for:

	Director Responsible
a. the budget and deciding how that budget was spent	Mr Paul Nicholson, Director of Finance Procurement Fleet and Estate

b. the number of ambulance clinicians	Mr Robert Sowney/ Ms Rosie Byrne, Director of Operations
c. the number of support staff, such as call handlers	Mr Robert Sowney/ Ms Rosie Byrne, Director of Operations
d. the number of ambulance vehicles	Mr Robert Sowney/ Ms Rosie Byrne, Director of Operations
e. response time targets that the Trust was directed to meet across 999, 111 and patient transport services	Mr Robert Sowney/ Ms Rosie Byrne, Director of Operations

22. NIAS both requested and received significant additional funding over the period of the pandemic.This was through a process of engagement across Health and Social Care organisations and with the Strategic Planning and Performance Group (SPPG – previously Health and Social Care Board – HSCB) and the Department of Health (DoH). Additional costs in relation to the pandemic were identified and shared with the region and a coordinated approach to additional funding agreed upon. This was throughout the duration of the pandemic and beyond. Requests for funding were provided in full over the period. Specific Covid allocations over the last three financial years were as follows:

Financial Year	2020-21	2021-22	2022-23
Description	£m	£m	£m
Specific Covid Allocations	16.8	14.4	14.7

23. Additional costs in relation to the pandemic were identified through normal financial management arrangements, under the leadership of the Director of Finance, which identified additional costs being incurred. These were shared regionally by the Director of Finance and six key areas in respect of Covid funding were agreed with DoH, SPPG and Trusts - Workforce, Service Delivery, Infrastructure, Equipment and Supply, Digital and Communications and Corporate.

24. This coordinated approach provided consistency across the region and assisted in the identification and completeness of associated costs. This also supported the development of Investment Proposal Templates documenting the requirement for

funds and provided a governance infrastructure for the provision of additional funding to the Trust.

25. NIAS sought this additional funding so that services could be maintained and enhanced in response to the pandemic. The additional funds provided were used in line with each of the six key areas of Covid Funding. For example, Workforce funding was used to support additional overtime payments to staff to maintain and enhance the service. Service Delivery funding was used to engage Independent Ambulance Providers to maintain and enhance the service. Equipment and Supply funding was used to purchase additional Personal Protective Equipment. Corporate funding was used for additional and enhanced cleaning of NIAS facilities and vehicles.

26. The Trust engaged in the following structures at regional level to steer healthcare system response to the pandemic/COVD-19. For example:

    a. HSCB/PHA Health Silver meeting. Daily meeting to provide opportunity for escalation from NIAS to Health Silver and Departmental Gold as appropriate. This meeting was, at the start of the pandemic, a daily meeting which was the main interface between the NI PHA, DOH, the HSC Trusts and PaLS/ BSO. Chairmanship was by NI PHA initially. The main topics discussed included preparedness, case numbers, case definitions, clinical pathways, sharing of guidance, Infection Prevention and Control, Business Continuity, finance, procurement and logistics (not exhaustive). As the pandemic progressed the format, membership and function of this group evolved and stabilised. Bespoke subgroups were set up to standalone from this group and to feed back into it. Membership then became more focused and reporting was through structured submitted templates. Examples of subgroups that were set up under this group included the NI IPC and PPE Cells. Subgroups were setup to discharge discrete functions that required subject matter experts/ or direct input from those connected to the operational business, for example the IPC Cell with membership by IPC Lead Nurses from across all HSC Trusts and led by PHA and the PPE Cell with membership from Trust Finance /Procuement & Logistics/ IPC teams

and led by PaLs/ BSO . Trusts began to submit a daily report to Health Gold as the requirement for daily meetings reduced.

b. NASPICG met daily initially to ensure that all Association of Ambulance Service Chief Executives (AACE) members had a mechanism for support, for sharing information, for problem solving and to provide ambulance sector expertise back into PHE guidance that was being developed for the ambulance sector. The Lead of the NASIPCG had a seat on the PHE IPC Cell. Through the NASIPCG the Chair was able to work with the member organisations including NIAS to ensure that PHE guidance which was produced was suitable for use in the ambulance service and was customised to be applicable to the ambulance service. This forum was helpful in ensuring that NIAS was involved in the response of the national healthcare system in relation to the COVID-19 pandemic such that guidance produced was operationalizable in ambulance services, was fit for purpose and that NIAS patients and staff were advocated for effectively. Guidance that was co-produced by the NASIPCG and PHE for the Ambulance sector was hosted on the PHE website alongside the guidance for other sectors which helped to ensure that this guidance was viewed as robust and credible by Ambulance staff. This NASIPCG also allowed for service specific guidance to be developed for non-operational ambulance settings to support ambulances services to safely manage essential service areas such as control rooms. Whilst there is overlap in many aspects of healthcare delivery between Ambulance and other Health Care settings there are also areas of divergence and the NASIPCG group was positioned to ensure that these areas of divergence were identified and thereafter that either bespoke guidance was produced in relation to these or extant guidance was customised to reflect required adjustments. This was critical in protecting critical ambulance service areas such as control rooms ensuring service continuity.

27. NIAS' Trust Board agreed NIAS Strategic Business Continuity Plan on 13th May 2018 [INQ000281188]. This plan formed an essential component of the NIAS Business Continuity Management system and supported the Trust's policy and strategy on business continuity. The plan was developed through examination of directorate

specific Business Impact Analysis documents and is aligned with the requirements for business continuity plans as set out in ISO22301:2012.

28. In terms of COVID-19 response, NIAS used the business continuity plan to:

- Utilise departmental business impact analysis (BIA) for each directorate to enable the Trust to identify areas which could be stood down or where alternative ways of working could be implemented, such as home working.
- Utilise departmental BIAs to provide a framework for measured and appropriate recovery of services.
- Utilise departmental BIAs to provide a prioritisation strategy for the allocation of IT equipment across the Trust, ensuring that those areas, which supported our key services, were given priority.
- Ensure that a Risk led approach was taken throughout surge and recovery and that appropriate mitigations were implemented where necessary.
- Support Business Continuity leads in collating and providing individual departmental Surge Plans to support overarching strategies.
- Exercise key areas to ensure resilience and derive learning to enhance our readiness.

29. Within the NIAS Strategic Business Continuity Plan, reference is made to NIAS having a number of 'incident specific plans' in place to deal with particular business continuity incidents, for example the Pandemic Flu plan is referred to in section 4.1.

30. Within the Plan there are four levels of business continuity incidents ranging from low level incidents to extreme level incidents. An extreme level incident relates to a loss of critical services / activities due a disruption or incident with is expected to last more than the recovery time objective and may cause risk to patient safety. Such an incident would include a pandemic. Actions taken in such incidents include the protection of core functions, the setting up of a command group to manage the disruption and the restoration of normality as quickly as possible.

31. The Trust's Flu Plan was amended in February 2020 at the beginning of the pandemic and supports the NIAS Strategic Business Continuity Plan. It details how management

of any pandemic will require command and co-ordination and close collaboration with HSCB and PHA. Areas covered in relation to the response to a pandemic include:

- Protecting core functions
- Information gathering and communications
- Infection control and PPE
- Education and training
- Impact of loss of staff or increase in demand
- Potential actions to be taken in the event of surge or loss of staff.

32. The National Ambulance Resilience Unit also issued specific guidance in January 2020. NARU issued 'Wuhan Coronavirus Guidance for Ambulance Trusts' version 1.0 dated 24 January 2020. This was written by the NARU IPC group in consultation with NHS England/Improvement, Public Health England and NARU and provided guidance for Ambulance Services regarding suspected or confirmed cases of WN-CoV. Suspected cases were to be managed in keeping with this guidance document and confirmed cases managed in keeping with HCID guidance for confirmed cases.

33. The NARU issued 'Wuhan Coronavirus Guidance for Ambulance Trusts' version 1.0 document provided information and guidance to NIAS relating to identification of cases, on scene clinician precautions (including appropriate use of PPE), conveyance, patient handover, post conveyance procedures including decontamination of vehicles & equipment.

34. Prior to the pandemic NIAS followed national guidance around "High Consequence Infectious Diseases" (HCIDs) and had a high consequence infectious disease protocol in place (For Viral Haemorrhagic Fevers -EBOLA). This would have been relevant in advance of the pandemic as the COVID-19 pandemic was deemed a HCID at the beginning. Viral Haemorrhagic Fevers (VHFs) are a subset of High Consequence Infectious Diseases (HCIDs), the protocols in place (January 2020) while referring to VHFs were capable of dealing with the range of HCIDs. The NIAS VHF Patient Flow Chart, based on the NARU VHF Risk Assessment, was developed to help determine the likelihood of a patient having a VHF/HCID and processes to deal with this.

35. During the pandemic, patients were prioritised for a 999 emergency ambulance response using Advanced Medical Priority Despatch System (AMPDS) to prioritise our 999-emergency ambulance response. During the Covid-19 Pandemic, MPDS ambulance services across the UK introduced MPDS Card 36 Pandemic card developed specifically to prioritise patients thought to have potential pandemic involvement. Details of Card 36 are attached **INQ000281180**

36. NIAS had a pre-existing series of appropriate patient pathways of which 'conveyance to hospital' is one. A large proportion of our patients are conveyed to hospital, some are managed through a phone call with a clinician in our control room (Hear & Treat) and some are discharged at scene by one of our ambulance-based clinicians (See & Treat) either with an onward referral to a specialist team e.g., a falls team, a diabetic team, a GP etc, or with worsening care advice. The decision on whether a patient was conveyed or left at home with a referral, or with advice in the event of worsening condition, was taken by the clinician with the patient or who was talking to the patient, using our published care pathways, and using the clinician's judgement on the best patient outcome. Our Appropriate Care Pathways document is attached [INQ000281186].

37. Guidance was developed early in the Covid-19 pandemic and was then reviewed and updated every time guidance was issued through NARU, NI PHA, PHE (now UKHSA) or the Association of Ambulance Chief Executives . The guidance document was issued with a different coloured front page each time it was updated and the final version is attached (version 12) [INQ000281186].

38. This guidance was iterative and was changed to reflect any updates from NI PHA, PHE (now UKHSA) or the Association of Ambulance Chief Executives as required. The guidance was designed to ensure that NIAS staff had access to a go to guide during the pandemic, included in the V12 of the guidance were sections on:

    - Aim of the guidance
    - Scope of the guidance
    - Roles and Responsibilities
    - Organsational learning
    - Background to the infection and the guidance
    - General information, including clinical symptoms

- Hierarchy of controls
- Dynamic risk assessmnet
- Key considerations
- Sample risk assessments
- PPE Decision Making Aid
- Hand Hygiene posters
- Posters showing doffing and donning of the different levels of PPE
- Decontamination process poster
- Information regarding care of the deceased.

39. At all times, including during the COVID- 19 pandemic, NIAS attend a range of undifferentiated patients – decisions were not differentiated to treatment and conveyance of clinically vulnerable patients. NIAS has in place a system to triage 999 calls with the aim of responding to patients in order of clinical urgency, using an internationally recognised system known as the Advanced Medical Priority Dispatch System (AMPDS). This system categorizes calls into those deemed to be immediately life-threatening emergencies (Category 1), potentially serious emergencies (Category 2), urgent calls (Category 3) and lower priority calls (Category 4).). During the Covid-19 Pandemic, MPDS ambulance services across the UK introduced MPDS Card 36 Pandemic card developed specifically to prioritise patients thought to have potential pandemic involvement. Details of Card 36 are attached [INQ000281180].

40. Treatment of clinically vulnerable patients was not altered during the pandemic but was required to be undertaken by clinicians wearing PPE. At different points in the pandemic different PPE ensembles and guidance were in place and as NIAS patients are undifferentiated all patients were managed in the same way, by staff utilizing the PPE that was required at that point in time.

41. Conveyance of emergency clinically vulnerable patients was not different to conveyance of any other patient during the pandemic. As above at different points in the pandemic different PPE ensembles and guidance were in place and as NIAS patients are undifferentiated all patients were managed in the same way, by staff utilizing the PPE that was required at that point in time.

42. Conveyance of non-emergency patients moved to a one patient per vehicle basis, this applied to all non-emergency patients which would have included clinically vulnerable patients and was based on the requirement to ensure at least 2 metres of physical distancing. This could only be achieved by having one patient in the saloon of a vehicle alongside an attendant at any given time. This could not be achieved where there was more than 1 patient in the saloon alongside the attendant.

43. Prior to the COVID-19 pandemic it was the practice that Ambulance patients would have been off loaded from the Ambulance and brought into wait for ED triage/assessment in the hospital, usually within a few minutes of arrival at the ED. This practice changed from the start of the pandemic whereby Ambulance patients were required to wait in the Ambulance until they could be taken to the correct area within the ED department. All NIAS patients including clinically vulnerable patients would have waited in the ambulance until the receiving facility was able to receive them into the right area for their needs within the hospital facility, they would have then been handed over to the hospital who would have then placed them appropriately.

44. Initially, NIAS' Voluntary Car Service was stood down due to most of their patients being classed as clinically vulnerable i.e., walking renal and oncology patients and also due to the fact that many VCS volunteers were also clinically vulnerable. A limited VCS was re-established when appropriate PPE and vehicle cleanliness regimes were introduced and when the VCS volunteers had declared their suitability to continue operating. We limited the patient carrying capacity on our Non-Emergency Patient Care Service (PCS) ambulances to one patient per journey and patients and crews all had to comply with relevant PPE guidance. NIAS issued a communique from our Director of Operations in November 2020 ceasing the servicing of non-urgent outpatient clinics to reduce the number of patients we were transporting and protecting capacity for patients who were likely to be vulnerable or of a higher acuity.

45. Northern Ireland does not utilise a 111 phone service therefore no separate advice or guidance was provided to callers.

46. A summary document entitled ' Copy of AACE IPC Resources COVID 2020-2022 QIGARD' is exhibited [INQ000281181] which provides a chronological listing of the

guidance that was produced by the AACE in relation to COVID-19. The summary document contains the titles of 24 documents that were developed and shared by AACE. Many are updates to guidance as indicated by the different Version numbers. As the pandemic was so dynamic there are examples here of documents that underwent several iterations and revisions. The key documents that NIAS utilised by AACE during the pandemic were:

a. -Working Safely During COVID-19 in Ambulance Service Non-Clinical Areas [INQ000281176]
b. -IPC Precautions during Handover Delays **INQ000257965**
c. -Ambulance Sector PPE [INQ000281182] [INQ000281183] [INQ000281184]
d. -Hierarchy of Controls [INQ000281177]
e. -AACE CPR AGP Position Statement [INQ000281179]

47. In addition, there has been significant input from NIAS HR to HSC COVID-19-specific workforce policy via involvement in Health Silver HR support cell and DOH/regional TUs consultative group.

48. In response to COVID-19, a Regional Human Resources Cell was established to support Health Silver in addressing and managing HSC Workforce Policy issues, which NIAS HR was significantly involved in. These Workforce Policy issues were communicated via the publication of regularly updated HSC Staff FAQs on the PHA website and followed regional policy guidance issued by the Department of Health.

49. Emergency Ambulance Control (EAC) dynamically altered operations in January 2020 to suit COVID-19 operating environment by pre-planning, preparing, training/exercising and amending procedures to ensure the Control functions remained functional and fit for purpose whilst under extreme pressure dealing with a pandemic event. Specific changes to the operating environment for EAC are summarised below in chronological order:

- In January 2020 – final preparations commenced for the deployment of a new Control Training & Contingency facility located in NIAS Site 5. This was in construction and due to be handed over to NIAS by the 31 03 2020.

- EAC Management attending briefing on COVID on the 07 02 2020. When EAC planning commenced.
- Discussions with SAS (Scotland) on 12 02 2020 to ensure any calls meeting COVID criteria that the information was passed to either service whilst using buddy arrangements.
- 24 02 2020 – review and update of EAC and NEAC departmental surge plans
- 24 02 2020 – Social distancing – Desks within EAC separated to create greater distancing between staff and commenced procurement of Perspex screens.
- 24 02 2020 – Increase cleaning within EAC environment.
- 10 03 2020 – New cohort of 6 EMDs commenced training.
- 11 03 2020 staff working within EAC who were also operational (ie CSD) stopped operational shifts. Removal of HEMs paramedics with team operating out of MLK airbase.
- 11 03 2020 Lock down of Control room to only essential EAC staff only.
- 13 03 2020 To enable the implementation of EIDS and P36 systems updates were applied to the CAD (PROQA / Paramount).
- 13 03 2020 Emerging Infectious Disease Surveillance (EIDS) deployed within Computer Aided Dispatch System, commencing with Chief Complaints: Sick Person (Protocol 26) Breathing Problems (Protocol 6 and then moved to all protocols from the 21st March.
- P36 implemented as described within section 11.
- Various changes were made throughout the period March 2020 onwards to systems and call scripts to evolving pandemic situation.
- 17 03 2020 - Laptops, mobile phones and other associated equipment deployed to CSD staff to enable remote clinical support.
- 18 03 2020 – preparations for implentation of Protocol 36, including training for existing staff. No send protocols developed alongside P36.
- Change in Rotas for Managers to include separations of senior manager for 7 day cover and to increase Duty Manager cover over peak periods. Managers.
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- Recruitment and redeployment of front line staff including CSO and Clinical Training staff to strengthen the role and function of the Clinical Support Desk.
- New EAC Training and Contingency facility at site 5 went live mid April 2020 which then enabled greater social distancing between control staff. Splitting call taking, dispatch and CSD between Site 5 and site 30.
- Home working for non-essential staff.
- Expedited EMD training – 24 staff
- 03 04 2020 Protocol 36 went live

50. The pre-planned training schedule was amended to include the use of the MPDS monitoring tool prior to implementation. In line with other Ambulance Services across the UK, EAC managers began pre-planning for the implementation of CARD 36 to the EAC call-taking protocols. Protocol 36 allowed EAC to assess patients who presented with signs or symptoms that may have been indicative of a pandemic condition i.e. COVID-19. These patients could then receive a specific dispatch code that enabled them direction to an appropriate care pathway – such as remain at home or contact their GP.

51. The decision to implement Protocol 36, and move through escalation levels was taken by the Senior Management Team also taking account of the overall U.K and Ireland position as relayed through regular meetings of national groups such as NASMeD. On Friday 03/04/20, Protocol 36 went live with level 1 and Senior Medical support was provided to NIAS to introduce this protocol. As part of the response to the escalating situation all UK Ambulance Services agreed to co-ordinate their response via the National Ambulance Coordination Centre (NACC). Direction on the implementation of Protocol 36 Level 1 was issued by Professor Anthony Marsh, National Strategic Adviser of Ambulance Services, NHS England and NHS Improvement on 29 March 2020 to all NHSE Ambulance Services. The devolved administrations considered this direction and agreed to implement Protocol 36 Level 1 by Friday 4 April 2020. This allowed for system configuration, testing and Staff Training.

52. Timely introduction of a new management level with the Emergency Medical Dispatch (EMD) Supervisors meant additional training could be delivered to EMDs whilst increasing call-taking performance.

53. The Paramedic Clinical Support Desk team was rapidly enhanced using suitably trained staff to provide clinical oversight 24/7 where possible with a more senior tier of staff introduced.

54. EAC Management team reviewed plans on a daily basis and altered priorities to ensure effective and efficient operations. A determination was also made in March 2020 through NASMed that voluntary Community First Responder Groups who did not have access to appropriate levels of PPE should be temporarily stood down in light of the personal risk of attending potential COVID patients as well as the risk of onward transmission to their own close contacts. Once PPE and IPC guidance and training was made available to these groups they resumed operation.

55. The COVID-19 pandemic presented significant challenges to the operation of NIAS's Patient Care Service (PCS), and the ability to respond to call demand, including the lower acuity patients carried by our PCS and Voluntary Car Service (VCS).

56. Concerns for the likelihood of transmission of the infection led to NIAS initially standing the Voluntary Car Service (VCS) down due to concerns for ability to socially distance and ensure compliance with IPC standards. Many VCS drivers were vulnerable due to medical conditions / age / transplant history.

57. During the first wave of the pandemic, HSC cancelled a large percentage of routine outpatient work and NIAS diverted some Patient Care Service (PCS) ambulances, which would have provided transport for these routine outpatient appointments, over to the renal workload that the VCS normally covered. PCS ambulances were also transferred to assist with Urgent and Emergency Care workload for the A&E service. NIAS increased use of Independent Sector resources to further supplement this.

58. Following further development of IPC precautions and equipment and from learning that recognised that NIAS' VCS was better suited to regular planned renal transports

than non-medical taxi companies, NIAS undertook individual risk assessments and re-established a number of the VCS.

59. As impact of the first wave of the pandemic eased off, a proportion of NIAS PCS returned to business as usual and by November 2020, as the second wave of the pandemic began to impact, NIAS took the difficult decision to cease providing transport to low acuity routine outpatient appointments. This enabled NIAS to transfer another tranche of PCS crews across to the Urgent and Emergency Care workload alongside the A&E ambulance service. This resulted in improved resource levels providing cover for Healthcare Professional (HCP) workload, routine high-dependency transfers and similar demand, coordinated and managed by the Emergency Ambulance Control (EAC) room.

60. Operating on behalf of the Non-Emergency Ambulance Control (NEAC) room, the increased level of Independent Sector (IS) resources (Voluntary and Private Ambulances) undertook remaining outpatient and routine workload. The normal VCS workload was picked up by these IS resources and also by taxis from the HSC taxi contracts.

61. The Trust communicated and/or worked collaboratively with NHS Trusts a member of regional groups which had representatives from all HSCNI Trusts. Regional groups included:

- the Civil Contingencies Group for Northern Ireland. (CCGNI)
- HSCB/PHA Health Silver and Departmental Gold
- COVID-19 Regional Surge Planning Group.
- NI PHA IPC Cell
- NI PPE Cell

62. NIAS have been active on the Regional Workforce Wellbeing Network since formation in April 2020 to work across organisations over Covid-19 to coordinate and share resources and strategies to best support each other. The Network is still operational and NIAS is leading on long term support interventions for moral distress.

63. NIAS provides emergency and non-emergency ambulance services in Northern Ireland, which shares a land border with the Republic of Ireland. The National Ambulance Service (NAS) provides emergency and non-emergency services in this jurisdiction. NIAS and NAS have a long-standing history of joint operational cover for example major incidents, capacity and shared health and social care services across Northern Ireland and the Republic. Additional support for pandemic response to NIAS was provided by NAS beginning 17 December 2020.

64. NIAS attends a range of undifferentiated emergency patients at all times. During the Pandemic Card 36 was added to the AMPDS system to support triage and dispatch. Response was determined by the outcome of the AMPDS triage process. PPE was worn in line with the PPE requirements that were extant. Emergency patient vehicles only carry one patient at time, as this was the case it was not necessary to change anything in terms of conveyance for patients. This process applied to all patients including at-risk and vulnerable groups, including but not limited to, those with protected characteristics under the Equality Act 2010 or the equality categories contained in the Northern Ireland Act 1998.

65. Prior to the COVID-19 pandemic it was the practice that Ambulance patients would have been off loaded from the Ambulance and brought into wait for ED triage/assessment in the hospital, usually within a few minutes of arrival at the ED. This practice changed from the start of the pandemic whereby Ambulance patients were required to wait in the Ambulance until they could be taken to the correct area within the ED department. All NIAS patients including at-risk and vulnerable groups, including but not limited to, those with protected characteristics under the Equality Act 2010 or the equality categories contained in the Northern Ireland Act 1998 would have waited in the ambulance until the receiving facility was able to receive them into the right area for their needs within the hospital facility, they would have then been handed over to the hospital who would have then placed them appropriately.

66. The COVID-19 pandemic presented significant challenges to the operation of NIAS's Patient Care Service (PCS). Concerns for the potential of transmission of the infection led to NIAS initially standing the Voluntary Car Service (VCS) of the Patient Care Service down due to concerns about the ability to socially distance and to ensure

compliance with IPC standards. Many VCS drivers were vulnerable themselves due to medical conditions / age / transplant history and as they were volunteers rather than trained healthcare professional it was felt that donning and doffing PPE to the standard required would be a significant risk.

67. During the first wave of the pandemic, HSC cancelled a large percentage of routine outpatient work and NIAS was able to divert this additional Patient Care Service (PCS) ambulances to cover the work that has been left by the need to stand down the voluntary car service.

68. Following further development of IPC precautions and equipment and from learning that recognised that NIAS' VCS was better suited to regular planned renal transports than non-medical taxi companies, NIAS undertook individual risk assessments with drivers and patients and re-established a number of the VCS.

69. In relation to health inequalities, the UKHSA, NI Department of Health and Public Health Agency (NI) were responsible for developing and providing national / regional policy, advice and guidance in relation to COVID-19 for all Health and Social Care organisations which was followed by the NIAS. In turn the NIAS developed 'internal' guidance based on this. As NIAS attend a range of undifferentiated patients based on clinical need and assessed through AMPDS Card 36 the factors described above in terms of taking into account health inequalities and the increased harm that viruses might pose to people from particular groups was not pertinent to the provision of emergency ambulance services at an individual patient level.

70. A comprehensive Communications Strategy was an essential component of the Trust's overall pandemic response and was the vehicle to disseminate emergency alerts and policies relevant to ambulance related healthcare to the Trust's staff during the relevant period. The aims of the Strategy included:

- Enabling, through the most appropriate communication channels, the delivery of relevant and timely information to relevant stakeholders
- Supporting all work-streams and action groups established as integral parts of the Trust's overall Pandemic Response

- Enabling staff to feel informed, motivated, empowered and involved.

71. In order to ensure consistency of message, in terms of content, style and presentation, a Single Point of Contact (SPOC), for communications advice and dissemination of information, was identified as the NIAS Communications Team with lead responsibility delegated to the Media and Communications Manager. All approved communications relating to COVID-19 were disseminated making use of, where appropriate, COVID-19 specific graphics, in written and digital formats. In relation to targeted Internal Communications, and in order to maximise reach, regular use was made of Team Briefing, E-mail, WhatsApp, SharePoint, Website, verbal handovers, messaging via multi-disciplinary teams, radios and notice boards and external facing Social Media Channels, where appropriate.

72. The communications strategy as highlighted above was overseen by a Bronze Cell on Information, led by NIAS' Media and Communications Manager. This was regularly reviewed and lessons learned reported to NIAS' SMT through a series of assurance reports. As highlighted previously in this response, a learning exercise was also conducted in consultation with NIAS staff. A specific objective of this exercise was 'Learning for the organisation in terms of communications and decision-making'. Learning on information dissemination was summarised in the staff consultation as follows:

73. What worked well:
    - Significant growth in staff WhatsApp Group membership. This group had approx. 250 members pre-COVID-19 and this number is now approx. 800+
    - Anecdotal data suggested staff satisfaction with communication improved during the COVID-19 response
    - Videos from Senior Management worked well but at times could be shorter
    - Support from Boardroom Apprentice and member of staff from HSC Leadership Centre

74. Challenges:

    - Communication cell was resourced by a small number of staff

- There was a dichotomy in striking a balance between ensuring staff were up to date with information and not overloading them since guidance changed so quickly

75. Where there were immediately relevant emergency alerts these were communicated in brief to operational staff who were directed to the full resource.

76. Staffing levels pre- and post-pandemic for both frontline and control staff are outlined in the table below:

Headcount/WholeTime Equivalent of Ambulance Staff Pre- and Post-Covid Pandemic	as at 28/2/20		as at 30/6/22	
	HC	WTE	HC	WTE
Frontline Emergency (inc EMT's, Paramedics, RRV Paramedics, Supervisors)	752	736.38	810	800.42
Frontline Non-Emergency (ACA's)	251	242.77	285	276.37
Control Emergency (inc Call Takers, Control Officers, Duty Control Managers)	118	114.08	134	128.82
Control Non-Emergency (inc Call Takers, Control Officers, Supervisors)	30	28.07	32	30.73

Staffing levels changed as per normal processes i.e., normal recruitment to planned, establishment levels, normal turn-over, sickness absence and some Covid-19 related absence. Covid-19 related absence was at times relatively high. In operations we increased our use of external independent ambulance contractors to supplement our non-emergency ambulance cover but did not undertake any additional recruitment over and above that which was planned or scheduled prior to the pandemic. In ambulance control we increased the establishment of EMD (call takers) by a significant number as a form of contingency planning due to the potential risks associated with any control room outbreaks. Some clinically vulnerable front-line staff were redeployed to other duties or to stay at home, so the available operations staffing numbers were reduced on a day-to-day basis and where possible, replaced through the use of overtime. We developed a team of Vehicle Cleaning Operatives who were agency staff.

77. The Trust made every preparation for the impact of staffing losses / reductions due to the Pandemic however call demand was somewhat reduced and our response time

performance was in line with pre-pandemic levels. Performance reports provided under the Gold SitRep process demonstrated we handled fewer non-emergency patient journeys and few emergency calls, and our service levels remained relatively steady. An example of one such Performance Report is exhibited INQ000281174 Our provision of care to our service users remained consistent.

78. We took measures to increase emergency control room staffing as above. We also increased staffing across some support functions such as staff testing, monitoring and risk assessing, vehicle cleaning, estate cleaning. The staff we used in these functions were redeployed from front-line operations due to vulnerability or suitability. We reviewed the availability of volunteers as compiled by central health /gov services (workforce appeal) but did not utilise any specific group. Our voluntary car service was reduced due to a high percentage of clinically vulnerable volunteers. We developed a team of Vehicle Cleaning Operatives who were agency staff and reported through IPC.

79. Operations Directorate including the control function had a steady and significant COVID-19 related absence level. Operations Directorate makes up approximately 91% of the NIAS workforce establishment.

80. In the initial phase of the Covid-19 pandemic NIAS established a silver control / staff operational support unit to deal with staff queries and to ensure consistent decision making. At that stage NIAS had to access testing through other HSC Trusts and this had a small negative impact on staffing levels. Shortly into the pandemic, NIAS established a facility to provide screening to enable staff that were self-isolating to return to work.

81. NIAS commenced PCR COVID-19 / SARS2 antigen testing of symptomatic staff and household members on 26th March 2020. Initially the team was working to clear a significant backlog of staff that had been abstracted with COVID-19 like symptoms. The process for reporting symptoms, triaging service users, managing results and referring for additional advice or support was complex and relied on numerous other units and departments feeding into this. Over the period of the pandemic, the COVID-

19 Testing Team (CTT) reviewed its processes and procedures in an attempt to streamline and improve its model of service delivery.

82. The CTT established and maintained close working relations with all departments to safely and effectively manage staff and their households through uncertain times. This resulted in the development of robust processes and procedures that put the CTT at the centre of COVID-19 response in advising and supporting staff through COVID-19 and testing. It is worth noting that the CTT had a small staffing cohort of four. This was supplemented out of hours by an additional three officers.

83. An Operational Support unit was set up within NIAS to support staff during this period. This unit initially operated 24/7. The unit supported staff with guidance and advice in relation to working practices in relation to COVID-19. The unit also provided staff support such as access to food, for example meal delivery to stations/ EDs, transportation where this was needed, accommodation where this was needed, adjustments to work schedules and work locations as needed. The roles of this unit was subsumed into the NIAS COVID-19 Testing and Contact Tracing teams as the pandemic progressed.

84. Work schedules were adjusted to facilitate release of NIAS staff to support with functions such as the Operational Support Unit, the Nursing home COVID testing programme, the COVID-19 Testing team, the COVID-19 Contact Tracing team. Work schedules were adjusted through the provision of Vehicle Cleaning Operatives who supported operational crews to decontaminate their vehicles during the pandemic.

85. The effect and scale of the challenge presented to communities and the workforce as a consequence of COVID-19 was unprecedented. Beginning in April 2020, the support provided to staff followed the regional HSC Framework developed and launched by the Minister to ensure a consistent and effective approach. The NIAS COVID-19 Strategy for Wellbeing followed the key principles and the psychological response phases in the framework.

86. Interventions to support staff health and wellbeing anticipated that only in the late recovery phase would the service see the full impact of the crisis on staff physically and psychologically.

87. NIAS put processes in place to support staff across a range of key supports:

- NIAS joined the Regional Workforce Wellbeing Network formed in April 2020 to work across organisations over Covid-19 to coordinate and share resources, strategies and supports to best support each other. The Network framework, Psychological Interventions: A Framework for our community of leaders as they support the well-being needs of HSC staff as a result of the Coronavirus pandemic, was used a guidance for NIAS leaders of services in responding positively to the demands being placed on staff. It also formed the basis of the NIAS Peer Support and Wellbeing framework.

- NIAS deployed the framework key principles of responding well in the 'active' phases of the pandemic. This included a communication strategy to ensure that managers were aware of support avenues for staff including the importance of self-care. Hard copy A6 PPE complaint wallet cards were produced and disseminated promoting the frameworks core Take 5 message and internal and external psychological support. A suite of messaging was shared including the publication and dissemination of working from home guidance and a going home checklist displayed in all stations based on the Institute for Healthcare Improvement "Psychological PPE": Promote Health Care Workforce Mental Health and Well-Being.

- Health and wellbeing support was available for ambulance service employees, volunteers and families through AACE were shared in regular communications. Peer support and wellbeing call teams were also trained in all local, regional and national referral processes. Physical health was also promoted through interventions such as the production and wide dissemination of a hydration Pee chart developed with the British Dietetic Association.

- NIAS staff were provided access to psychological helplines in the trust area they worked or lived in. As part of the regional workforce wellbeing work stream, NIAS supported the development and distribution of a COVID-19 Staff Wellbeing survey. Across HSC NIAS had the highest response rate (7.0%). The research aimed to improve understanding of how health and social care staff in Northern Ireland were affected by the COVID-19 outbreak, and to check if the psychological supports provided by the trusts are meeting staff wellbeing needs.

- Wellbeing Calls and Peer Support: Wellbeing calls to staff offering psychological support and information to staff continued from April 2020 until late October 2020. Peer support workers supported this process in addition to their core purpose, responding to the substantial non-COVID-19 based trauma demands across the organisation.

- Enhanced psychological support: Staff were provided psychological interventions for those who required it. The wellbeing team promoted the Inspire employee assistance service, including direct referral pathways from peer support to Inspire with the support of Occupational Health. Staff have also been encouraged to access the Inspire online support hub which provided: online self-assessment, psychoeducation, digital intervention and escalation into appropriate services as required. Staff accessed the hub using the NIAS secured pin to create an account personal to themselves.

- Providing accessible and accurate information: The wellbeing team identified issues facing staff and provided quality assured, accurate information and support across NIAS communication platforms. This included promotion of the regional mental health and emotional wellbeing campaign - 'Working Together to Promote Mental Wellbeing'. The campaign, launched by the interim Mental Health Champion on World Suicide Prevention Day highlighted the 5 steps to wellbeing. NIAS used each week to promote internal sources of support such as peer support and encouraging staff to complete the psychological first aid training on HSC learning.

- The close monitoring of issues and themes arising from wellbeing and peer support calls identified areas of specific need. This included the need for additional support for staff in the emergency ambulance control. A short-term HR task and finish group co-produced with EAC colleagues a 'high importance, high impact' matrix of potential interventions. Interventions included the use of NHS Covid staff wellbeing funding to source a wellbeing pod/quiet space for the team to access.

88. NIAS followed Workforce Policy guidance published on HSC Staff FAQs on the PHA website and regional HSC Guidance. Regional guidance covered management of, and support to, staff considered to be Clinically Extremely Vulnerable (CEV) to severe illness and those with underlying health conditions.

89. NIAS continues to be actively involved in the Regional Workforce Wellbeing Network and deployed interventions based on the frameworks 'recover phase' guidance. This includes co-producing and promoting the development of the HSC Staff Covid Recovery Toolkit in the later stages of the pandemic. This has developed into an HSC staff support website that includes a NIAS Mind Blue light support section. The framework predicted that some staff may be impacted emotionally with feelings guilt or shame in this recovery phase. A focus on team-based activities was recommended to support recovery. Team based activities including team reflection days at Blossoms Larne is underway even amidst continuing operational pressures. Engagement and interest in team-based reflection and psychoeducation program has been positive. Themes include raising awareness of moral distress and supportive approaches such as self-care and empathy and compassion-based workshops.

90. When considering psychological responses, it was predicted that most staff will feel able to cope successfully using their own preferred style, individual resources, and social support. Many may be changed in a positive way, experiencing personal development, and post traumatic growth. Feelings of guilt however leading to moral distress or injury could be expected in the long term and recovery phase. This was confirmed in data from the NIAS staff data from the regional Covid Wellbeing survey. Throughout the pandemic rates of moderate-to-severe depression (38-40%), anxiety (25-33%), PTSD (27-42%) and insomnia (29-44%) remained high amongst NIAS staff.

Compared to other HSCNI staff, levels of depression, anxiety, post-traumatic stress and insomnia were either similar or higher amongst NIAS staff throughout the COVID-19 pandemic.

91. To promote help seeking behaviours and improve the identification of the need for support a programme based on the AACE mental health continuum has been deployed. These interventions and work with Inpsire to get staff the right support at the right time has led to an increase in the uptake of services and staff reporting that the support was beneficial and was fit for purpose leading to better outcomes.

92. Response time targets for 999 and patient transport services during the relevant period are outlined in the table below. As indicated previously, Northern Ireland does not have a 111 service.

Category	Measurement	Standard
Cat1	Mean	00:08:00
	90th Centile	00:15:00
Cat1T	Mean	00:19:00
	90th Centile	00:30:00
Cat2	Mean	00:18:00
	90th Centile	00:40:00
Cat3	90th Centile	02:00:00
Cat4	90th Centile	03:00:00

93. Guidance was developed early in the Covid-19 pandemic and was then reviewed and updated every time guidance was issued through NI PHA, PHE (now UKHSA) or the Association of Ambulance Chief Executives . The guidance document was issued with a different coloured front page each time it was updated and the final version is attached (version 12).

94. This guidance was iterative and was changed to reflect any updates from NI PHA, PHE (now UKHSA) or the Association of Ambulance Chief Executives as required. The guidance was designed to ensure that NIAS staff had access to a go to guide during the pandemic, included in the V12 of the guidance were sections on:

- Aim of the guidance

- Scope of the guidance
- Roles and Responsibilities
- Organsational learning
- Background to the infection and the guidance
- General information, including clinical symptoms
- Hierarchy of controls
- Dynamic risk assessmnet
- Key considerations
- Sample risk assessments
- PPE Decision Making Aid
- Hand Hygiene posters
- Posters showing doffing and donning of the different levels of PPE
- Decontamination process poster
- Information regarding care of the deceased.

95. As of 01 March 2020 NIAS fleet consisted of 116 A&E Ambulances, 116 Patient Care Service Ambulances, 42 Rapid Response Vehicles (RRV) (of which around 15 – 20 are operational for about 16 hours of the daytime) and approximately 50 miscellaneous support vehicles. From this fleet, NIAS operated on average around 62 A&E ambulance across NI on a Day Shift and approximately 47 A& E Ambulances on a Night Shift.

96. NIAS utilised around 19 independent voluntary or private ambulance contractors within the Patient Care Service and around 10 – 15 contractors working on A&E Support activities each day. This number may have varied slightly at various periods throughout the pandemic.

97. The table below summarises 999 calls and 111 calls made to the Trust in the full week up to 1 March 2020 and the extent to which response time targets were met:

Total Number of calls received	**5,159**

Category	Measure	Percentage met target
Category 1	Mean	44.4%
	90th Centile	78.6%
Category 1 T	Mean	57.2%
	90th Centile	63.1%
Category 2	Mean	55.8%
	90th Centile	87.7%
Category 3	90th Centile	83.7%%
Category 4	90th Centile	88..8%

98. 3,178 Non-emergency/patient transport bookings were made with the Trust in the full week up to 01 March 2020 .

99. Demand on services was reduced during the Covid-19 pandemic however NIAS is not currently resourced to achieve the existing response time targets. Performance against these targets remained consistent with pre-pandemic levels [INQ000281174].

100. NIAS did not change fleet size during the pandemic nor take any steps taken to expand capacity during the relevant period.

101. As indicated previously, NIAS experienced a decrease in demand. This reduction may have been as a result of whether "stay at home, protect the NHS" messaging having an impact on patients willingness to seek care, however NIAS does not have empirical evidence to suggest this was the sole reason. As indicated previously in this statement, NIAS communications channels continued to urge patients to request assistance in the event of an emergency.

102. Infection prevention and control (IPC) in ambulances was fully mandated by National guidance in relation to COVID-19.

103. NIAS worked as an active member of the National Ambulance IPC Group (NASIPCG) which worked alongside PHE (now UKHSA) to take the IPC guidance for inpatient settings and to adapt it for Ambulance Settings. This was undertaken in respect of both guidance for clinical contexts and for the general ambulance work place.

104. IPC guidance was produced by PHE, the NASIPCG then reviewed this guidance and considered the application of same within the Ambulance Service. The NASIPCG then fed this back to PHE who incorporated the Ambulance viewpoints, suggestions and perspective.NIAS was also involved in a similar process in NI where PHE guidance was reviewed by the NI IPC Cell led by PHA. This guidance was then adapted for the NI context to take account of regional differences, differences in phraseology etc. The NI IPC Cell also had a seat at PHE on the guidance development section and this was informed by the IPC Cell Group and the sitting NI member on the PHE guidance committee

105. in relation to changes to infection prevention and control measures in ambulance healthcare settings during the relevant period, NIAS developed a document entitled 'NIAS Operational Guidance for incidents involving Coronavirus (COVID-19)'. The first iteration of this document was produced in Jan 2020. 12 versions of this document were produced across the various phases of the pandemic with Version 12 being produced in June 2022. As infection prevention and control measures changed in ambulance settings, informed by national (PHE/ UKHSA) or regional guidance (NI PHA), this document was amended and circulated. The document has an appendix which summarises all of the key changes in order of chronology. The table below summarises the changes to the IPC measures during this time.

Date	Version	Changes
Jan 2020	1	New document based on PHE Guidance
Jan 2020	2	Case definition changed to flow chart 1.5 and updated donning and doffing
Feb 2020	2.1	PPE requirements and disposal of linen updated to PHE Guidance

March 2020	2.2	Contact HALO added to EAC action card, decontamination PPE requirements added
March 10 2020	3.0	Case definition changed flow chart 1.6. PPE changed. Change to officer action card
March 11 2020	4.0	Case definition changed flow chart 1.7. PPE requirements changed
March 12 2020	4.1	Number for BHSCT modified – mobile number removed
March 14 2020	5.0	Case definition changed flow chart 1.8 PPE requirements updated to PHE Guidance
March 15 2020	6.1	Risk assessment flow chart updated to v2.0 .Minor wording changes to Appendices E, F, G & H - all to v5.0 – PPE donning and doffing Update to Appendix J – Vehicle Decontamination.
April 5 2020	7.0	Layout formatted and use of colour coding added to assist in identifying current version. Risk assessment flowchart updated to version 3.0 .Inclusion of Regional COVID Destination Protocol. Updated PPE Decision Making Algorithm Inclusion of HSC Regional Clinical Area Zoning & PPE Requirements. PPE Donning & Doffing updated to highlight hand hygiene to extend to forearms, possibility of gown in place of Tyvek suit & Powered Respirator Hood Roles & Responsibilities and Action Cards Updated.
April 16 2020	7.1	Update to Background, Risk Assessment Flowchart & Decontamination Sections. Inclusion of RIDDOR Reporting, Considerations for Cardiac Arrests & Guidance for Care of the Deceased with Suspected or Confirmed Coronavirus.
May 27 2020	8.0	Risk Assessment flowchart updated to version 4.0 following case definition change. Regional Destination Protocol updated to v2.2. Action Card 3 updated with updated wording regarding provision of fluid repellent surgical mask (TYPE IIR) to patients. Action Card 3 updated with increased emphasis on need to ensure a Patient report form is completed and information regarding air conditioning / air extraction systems .Appendix Q - Considerations for Cardiac Arrests updated with information regarding fluid repellent surgical mask (TYPE IIR)s (TYPE IIR) and oxygen masks during resuscitation, information regarding risk assessment and updated Cardiac Arrest PPE infographic added.
August 7 2020	9.0	Updated wording to sections 2.Objectives, 3.Scope, 4.Roles & Responsibilities, 5.Criteria for implementation, 6.Organisational Learning .Risk assessment flowchart replaced with 'NIAS flowchart for the management of all patients during sustained transmission of COVID-19'. Destination Protocol Updated to version 3.1 and additional note added regarding paediatrics attending RBHSC .NIAS

		Personal Protective Equipment (PPE) decision making algorithm updated to version 4 (28-7-20). Manager/Officer Suggested Contingency PPE list updated .Disinfectant Wipes description changed from 'Clinell Universal Disinfectant Wipes' to generic description 'NIAS approved combined detergent and disinfectant wipes' throughout document. Update to Roles & Responsibilities, Action Card 1 (Ambulance Control), Action Card 2 (Officer/Manager) & Action Card 3 (Responding/Conveying Resource) all to version 3.0 .Inclusion of 'Contents Page' hyperlinks throughout document to aid navigation of document in pdf format.
October 19 2020	10.1	Appendix A - NIAS flowchart for the management of all patients during sustained transmission of COVID-19 updated to version 1.1. Change of wording on social distancing to include use of a fluid resistant (Type IIR) surgical mask when a crew is travelling in ambulance vehicles, not on a call and unable to maintain 2 metres social distancing .Appendix B - Appendix B – Regional COVID Destination Protocol updated to version 5 19- 10-20 Appendix C - NIAS Personal Protective Equipment (PPE) decision making algorithm updated to v5 7-10-20 and now includes section on PPE required when not undertaking direct patient care and where social distancing of 2 metres is not achievable between staff e.g. travelling in vehicles when not on a call, in ambulance stations and other facilities. Appendix D - HSC Regional Clinical Area Zoning & PPE Requirements. Note added regarding use of a fluid resistant (Type IIR) surgical mask in communal areas and inside buildings .Update to action cards for EAC/NEAC, Managers/Officer and conveying resources to include reminder of use of fluid resistant (Type IIR) surgical mask where social distancing is not possible. Inclusion of Appendix T - Guidance for NIAS Managers when informed of staff member symptomatic or tested positive for COVID-19. Inclusion of Appendix U - Wearing of Surgical Masks in Ambulance Workplace.
March 01 2021	11	Version updated to version 11.0 – RED. Update of Appendix A - NIAS flowchart for the management of all patients during sustained transmission of COVID-19 to version 2.0 . Additional details regarding AGPs added. Additional information regarding donning Level 3 PPE prior to arrival added. Additional information regarding use of visors in Level 2 PPE Updated wording added to Appendix D. HSC Regional Clinical Area Zoning & PPE Requirements updated. Updated PPE Donning and Doffing infographics in following appendices - Appendix E – Level 2 PPE Donning - NO AGPs

		, Appendix F – Level 2 PPE Doffing – NO AGPs , Appendix G(a) – Level 3 PPE Donning with FFP3 – AGPs Present / Appendix G(b) – Level 3 PPE Doffing with Powered Respirator Hood – AGPs Present, Appendix H(a) – Level 3 PPE Doffing with FFP3 – AGPs Present , Appendix H(b) – Level 3 PPE Doffing with Powered Respirator Hood – AGPs Present Appendix U. Wearing of Surgical Masks in Ambulance Workplace updated to version 3.0. Inclusion of Appendix V – Precautions during Hospital Handover Delays .Inclusion of Appendix W - List of medical procedures for COVID-19 that have been reported to be aerosol generating (AGPs) .Version control section moved to Appendix X and insertion of latest updates section in place of version control at start of document.
June 10 2022	12	Version updated to version 12.0 Grey. Update of Aim and Source of COVID-19 guidance Update of Background Section to reflect move to NI IPC Manual. 12.0 – Grey Inclusion of sections: 7. General Information 8.Hierarchy of Controls 9.Dynamic Risk Assessment 10. Key Considerations/ Controls Update to Appendices: - Removal of flowchart of management of all patients during sustained transmission - Removal of regional destination protocol - Removal of PPE decision making protocol - Removal of HSC Zoning requirements - Removal of PPE Contingency table - Removal of appendix re clinical waste and linen - Removal of roles, responsibilities and action cards - Removal of appendix re RIDDOR reporting - Removal of appendix re considerations for Cardiac Arrest - Removal of appendix re staff members testing positive for COVID-19 - Removal of appendix re wearing of surgical masks in Ambulance Workplaces . Addition of revised appendices: - Appendix A, Sample risk assessment - Appendix B, PPE decision making aid - Appendix C, Hand Hygiene - Appendix D, all PPE types consolidated into one appendix - Appendix E, Decontamination, minor wording changes only to reflect update to AGP list. Appendix H, AGP list update to reflect NI IPC Manual List

106. Specific considerations given to infection prevention and control within ambulance vehicles was undertaken in line with guidance from PHE, PHA and AACE (NASIPCG) and was drawn up into a set of internal guidance for the service ' NIAS Operational Guidance for incidents involving Coronavirus (COVID-19') [INQ000281186].

107. In order to support operational crews during the pandemic additional vehicle cleaning operatives were brought into the organisation to support with vehicle

decontamination at Emergency Departments. 365/ 24/ 7 cover was provided to support with this. Vehicle Cleaning Operatives were fully trained in terms of cleaning requirements, techniques, standards and PPE.

108. The Trust had access to various PPE and RPE stock at this time. Stock levels would vary day by day as goods were received into central stores and distributed to ambulance stations. The stock held in NIAS Central Stores on 1 April 2020 is shown below. In addition, the Trust held stock at Ambulance stations and locations and also in vehicles. Further stock was also available from the Business Services Organisation (BSO) Procurement and Logistic Service (PaLS) who almost exclusively procure the PPE for NIAS and all HSC organisations. Through BSO PaLS, NIAS also had access to Pandemic Influenza Preparation Programme (PIPP) stockpiles managed by the Department of Health.

PPE	NIAS
Apron	16,500
FFP3 - 1895v+ (8835+)	1,050
FFP3 - 8833	520
FFP3 - 1863	50
FFP3 - 1873v	200
Gloves	1,086,445
Gown	3,150
Type IIR	40,000

109. Access to supplies and PPE during the relevant period was almost exclusively through BSO PaLS. There were undoubtedly difficulties in obtaining PPE of the required type, quantity and specification during the period. The demand for PPE in NIAS, across the NHS and globally increased sharply at the beginning of the pandemic. This resulted in difficulties in replenishing stock with the required levels and types of equipment. For NIAS, a specific example at the start of the pandemic was in relation to aprons of the required number and specification for use in the pre-hospital environment. This was managed through access to regional stocks of equipment and subsequently a specific procurement of heavier gauge aprons more suitable for ambulance service clinical practice. The impact of these difficulties created significant local and regional management action in order to increase supply and

ensure appropriate distribution of available stocks. There were also concerns and confidence issues across the service as to whether supply could be maintained and improved.

110. The main change during the period was that NIAS, along with all Health and Social Care (HSC) organisations, moved to a demand management system around March 2020. Essentially, this involved a coordinated approach between DoH, BSO PaLS and all HSC organisations including NIAS to target available supplies based on availability and need across organisations.

111. The Northern Ireland Audit Office (NIAO) completed a learning Report on the supply and procurement of PPE during the pandemic in Northern Ireland [INQ000281185]. The executive summary of this document is extracted in the bullet points below:

- The five HSC Trusts each deliver regional integrated health and social care services across settings which include hospitals, health centres, residential homes and care centres. staff required PPE. Gloves, aprons and Type IIR masks collectively accounted for over 99 per cent of demand, with very limited use of more sophisticated equipment such as eye protection, face visors, FFP3 (respirator) masks and gowns. Independent care sector (ICS).
- The local independent health and social care sector also provides key community-based social care services. usage was also mainly restricted to gloves and aprons for standard infection control purposes.
- PPE used by the HSC sector was almost exclusively procured by the Business Services Organisation Procurement and Logistics Service (BSO PaLS), an independent body of the Department of Health (DoH or the Department).
- BSO provides the local HSC sector with a range of business support functions and professional services. Within BSO, PaLS is the sole provider of professional procurement and logistics services to HSC organisations. , and annual expenditure was just under £3 million. BSO PaLS did not however, have responsibility for emergency planning for stockpiles of PPE for events such as a pandemic. Within the ICS, each individual provider procured their own PPE.
- This stable situation changed dramatically with the arrival of COVID-19. Overall demand for PPE increased sharply, rising by 429 per cent in comparison to 2019.

The need for specific items also spiked – by between 3,700 per cent and 16,500 per cent for items only previously used on a limited basis. At the same time, intense global demand meant supplies became very limited.

- In the midst of considerable uncertainty over future demand, BSO PaLS decided on 27 January 2020 to increase its PPE stockholding from 4 weeks to 12 weeks supplies. However, the high subsequent demand meant that this would have equated to less than one week's supply for dealing with COVID-19. By March 2020, BSO PaLS held just over 16 million core PPE items. It had no stocks of fluid repellant gowns or visors as demand for these among local healthcare providers was very limited prior to the onset of COVID-19. Compared to usage experienced during the pandemic, the supplies held equated to around one week's supply of aprons, and less for all other items apart from gloves.
- With concerns emerging that increased ordering by HSC staff had led to stock levels running very low, the Chief Pharmaceutical Officer, following advice from BSO PaLS, directed it to introduce demand management arrangements on 23 March 2020. From that date, BSO PaLS began allocating supplies of available PPE directly to HSC Trusts, who attempted to deploy this in a more prioritised way.
- By March 2020, DoH was acknowledging significant issues over local PPE availability. In that month, the Royal College of Nursing (RCN) and Independent health & care providers (IHCP).
- The Royal College of Nursing is the main UK nursing union body. Independent health & care providers is the representative body of independent care providers in Northern Ireland. both reported many members raising significant concerns over availability, particularly for FFP3 (respirator) masks. They stated that they had repeatedly highlighted these issues to DoH and other HSC organisations. BSO PaLS told us that whilst it occasionally ran out of specific requested FFP3 masks, it always had access to alternative models. Both bodies continued raising concerns into April 2020, particularly in respect of independent sector care homes.
- Department of Health (DoH) guidance issued in March 2020 outlined that independent providers were required to source their own PPE, but that Trusts should try and ensure they had access to appropriate equipment. However, it also indicated that supplies should only be provided when suspected or confirmed COVID-19 cases arose. At this time, public heath guidance still stated that independent providers did not require enhanced equipment. IHCP maintains that,

throughout March 2020, care homes only received small PPE supplies when Covid-19 was present, which did not properly address the considerable shortages in that sector.

- A DoH review completed on 28 April 2020 acknowledged that "overall confidence in PPE supply is low", and that "there are shortages of PPE stock in the system", but also highlighted that "many have reported that over recent weeks the system has been improving". Whilst stakeholders highlighted positive areas, including coordinated ordering and supply arrangements, they considered that challenges remained around availability, timeliness of supply and quality of PPE.
- By late April 2020, the supply situation had considerably improved. Whilst in March 2020 BSO PaLS delivered just 17.2 million core PPE items, between April 2020 and May 2021, it provided an average of almost 32 million items every four weeks. By July 2020, its central stocks had increased to 132 million core items compared to 16 million items in March 2020. Overall, BSO PaLS has delivered 498 million core PPE items between March 2020 and May 2021.
- Supply to the independent sector had also increased, with providers routinely receiving PPE free of charge through Trust distribution systems. IHCP stated that independent providers were receiving adequate supplies by mid-April 2020, but that the situation only improved as COVID-19 cases in care homes began escalating. Independent sector providers have received over 175 million core and COVID-impacted items.
- In the early stages of the pandemic, it became clear that existing contracts would be insufficient to provide reliable supplies or meet the hugely increased demand. In trying to identify new sources, BSO PaLS assessed over 2,000 potential leads, engaging 45 new suppliers between January 2020 and April 2021, from whom it has ordered almost 618 million core PPE items.
- As well as these procurements, DoH signed a £60 million PPE contract in April 2020. Between January 2020 and April 2021, BSO PaLS and DoH raised purchase orders for 1.3 billion core PPE items, with a total cost of £397 million. Of this, £25.7 million related to competitive contracts, with almost all of the remaining £371.3 million relating to Direct Award Contracts (DACs) (i.e. untendered contracts).
- Direct Award Contracts (DACs) mainly occur when a contract is let without competition, and when insufficient time exists for a full procurement process. The Public Contracts Regulations 2015 permit DACs to be awarded where genuine

reasons exist for extreme urgency. On 18 March 2020 the Cabinet Office decided that these `emergency regulations' could be used to procure PPE during the pandemic.

- The global supply shortages meant that the average costs of PPE purchased between April 2020 and June 2020 were significantly higher than early 2020 prices. This was particularly the case for gloves (733 per cent), gowns (957 per cent) and Type IIR masks (1,314 per cent). Some independent sector suppliers were also reportedly charging up to eight times the previous prices for various items. BSO PaLS referred 60 examples of cost inflation to the Competition and Markets Authority in May 2020, but proceeded with these orders to obtain PPE, spending almost £127 million. Although prices subsequently reduced, they have still remained above pre-pandemic levels.
- Some contractors also began requesting payment in advance of supply. In one case, a supplier who received a £0.88 million prepayment failed to deliver an order for 2.5 million Type IIR masks. BSO PaLS had identified this supplier as high risk prior to contract signature, and has commenced legal action to try and recover this amount. The need for equipment meant that BSO PaLS placed orders with six `high risk' suppliers. Aside from the unrecovered prepayment, no significant problems arose with these suppliers, although a September 2020 Internal Audit (IA) review highlighted BSO PaLS had engaged them without requiring any additional internal approval, and identified risks around multiple prepayments to the same suppliers and inadequate risk assessments on suppliers requesting prepayments.
- Effective arrangements are required for identifying and managing conflicts of interest (COIs) for untendered contracts. BSO PaLS relied on existing controls involving annual staff declarations, and did not introduce any additional safeguards. It stated that no potential offers were `fast-tracked', and all had to pass quality and specification assessments. No BSO PaLS staff have declared any COIs, but no further steps have been taken to identify any potential undisclosed conflicts.
- Where supplier prices "varied considerably" from prevailing market rates, BSO PaLS highlighted that approval for a DAC was only sought where supply was in jeopardy, but acknowledges that this process was not documented. Such documentation would have helped provide a more

- The COVID-19 pandemic: Supply and procurement of Personal Protective Equipment to local healthcare providers.
- complete audit trail of decisions taken, but BSO PaLS stated that its documentation complied with the Public Contracts Regulations 2015.
- We recognise the commitment and work undertaken in very challenging circumstances by staff in DoH, BSO PaLS, HSC Trusts and other bodies to procure, store and distribute PPE throughout the pandemic.
- The RCN expressed concerns to the Health and Safety Executive Northern Ireland in March 2020 that local fit-testing.
- The fit-testing of FFP3 masks is a legal requirement to verify that a respirator mask matches a person's facial features and seals adequately to their face.of FFP3 masks was then not widely available, potentially increasing infection risks. BSO did not let a single fit-testing contract at the outset of COVID-19 arriving in Northern Ireland as HSC Trusts had specific needs and given time pressures, it was more expedient for Trusts to award their own DACs for this service. As BSO PaLS had not let fit-testing contracts when COVID-19 arrived in NI, Trusts had to individually award DACs for this service. A Serious Adverse Incident investigation on the early quality of fit-testing remains ongoing. A review in mid-2020 identified that almost 2,900 HSC and ICS staff required further fit-testing. A regional fit-testing framework is currently being developed.
- An April 2020 RCN membership survey identified that a significant proportion of local respondents were using donated, home-made or self-bought PPE. A DoH review in that month acknowledged that in some instances, the quality of PPE had been unreliable, with users reporting the "poor and unacceptable quality of some PPE supplies". Despite this, DoH highlighted that equipment has only had to be withdrawn due to safety concerns in a relatively small number of instances, given the volume of PPE purchased, and was limited to certain types of facemasks, eye protection and gowns in the earlier stages of the pandemic.
- To gain assurance that newly offered PPE meets the required specification and quality, BSO PaLS established a detailed pre-procurement assessment from 1 April 2020. By mid-May 2020, almost 600 proposed items from 248 suppliers had been assessed, with 45 per cent being rejected. These validation processes are clearly valuable in identifying unsuitable equipment, but further work is ongoing, as

HSC staff highlighted that some approved products had exhibited practical deficiencies when used in clinical practice.

- Reliable demand modelling for PPE was important given the high transmissibility and increased demands associated with COVID-19. However, a lack of information and frequently changing infection control guidance made it difficult to produce accurate projections for PPE needs.
- BSO PaLS and the Public Health Agency (PHA) had collectively developed initial demand modelling in late March 2020. By late June 2020, the PHA and HCS Trusts had jointly developed further Reasonable Worst Case Scenario (RWCS) projections. With further refinements, BSO PaLS has used this approach with the target of building a 12 week RWCS stockholding. However, as actual usage has fallen below RWCS projections, BSO PaLS had accumulated large stocks of core PPE items that equate to between 48 weeks and 71 weeks supply by July 2021. A significant proportion of this PPE was procured under the higher cost DACs which were awarded during the `emergency' phase of the pandemic, based on early modelling projections. BSO PaLS considers that these levels of stock are not dissimilar to those held elsewhere in the UK.
- Given the initial supply chain problems, BSO PaLS, Invest NI, Construction and Procurement Delivery and DoH took various steps to encourage local businesses to begin manufacturing PPE, or increase existing operations. This resulted in seven DACs with a total estimated value of £165.8 million being approved with local businesses. To support more flexible and longer-term competitive procurements, BSO PaLS established a Dynamic Purchasing System (DPS) on 25 June 2020. To date, it has awarded two competitive contracts under this, totalling £38.3 million. The limited number of competitions to date reflects the very large stocks built up under the emergency regulation contracts. BSO PaLS is reviewing stock levels and demand, to inform further DPS procurements.
- Prior to the pandemic, the cost of standard infection control PPE was included within DoH tariff rates to remunerate ICS providers for care provision. Whilst the free of charge provision has met the sector's dramatically increased and changing PPE needs without imposing any increased cost burden, this policy is unlikely to continue indefinitely, meaning that the existing tariff may have to be reviewed. Some form of centralised procurement process across the ICS could also enhance security of supply, and deliver better value for money.

- Whilst BSO PaLS existing PPE stocks sufficiently addressed pre-COVID demand, these were clearly inadequate for meeting the huge increase in demand which arose with the arrival of COVID-19. National contingency planning for an influenza pandemic also provided access to a useful but limited emergency PPE stockpile. Whilst BSO PaLS has now ensured security of PPE supply for the foreseeable future, it is important to consider how longer-term planning can be further enhanced to ensure no future repetition of the shortages experienced in the early stages of the pandemic.
- The widespread use of emergency procurement regulations and ability to award contracts without competition proved critical in helping ensure that the hugely increased volumes and new types of PPE required for COVID-19 were secured, albeit at a considerable economic cost. To avoid having to excessively use such contracts in the future, local procuring authorities need to.
- Consider how supply chain resilience can be strengthened and made more flexible to address any significant future increase in demand, not only for PPE, but for other goods and services for which demand could increase significantly and suddenly.
- Early concerns around the quality and suitability of some PPE issued to healthcare staff have largely been resolved through the introduction of innovative and collaborative quality assurance processes. To maintain staff confidence, it is important that these processes are sustained, and where possible, further enhanced.
- In addition to considering how contingency and emergency planning arrangements can be strengthened, more work is required in the area of demand modelling. Longer-term supply arrangements for the ICS also need to be clarified. Ongoing assessments of PPE supply chain readiness to meet the needs of local healthcare providers are also required, given the potential for future waves of COVID-19 and for other infectious pandemics.

112. PPE provided to ambulance staff was provided in line with the standards described by the PHE. The NIAS IPC Lead was involved in the NI PPE and IPC cells where PPE which met the required standard was assessed for usability and practicality. The adequacy of the PPE was based on the PPE meeting the applicable testing standards, being advised by PHE and then being practically tested by the IPC Cell/ PPE Cell.

Within NIAS any feedback received in relation to PPE was returned through the NIAS PPE cell to the NI PPE Cell. NIAS worked in partnership with BSO and the other HSC Trusts to support the development of PPE in NI including Disposable Visors from Bloc Blinds and FFP3 masks from Denman/ Denpro.

113. The PPE and IPC Cells for NI worked together to weekly review samples of PPE which met the agreed standards to ensure usability.

114. The Northern Ireland Ambulance Service does not independently develop or issue any Do Not DNACPR notices, but in a process that existed before the COVID pandemic, it does record the existence of DNACPR notices and requests which have been forwarded by a patient's General Practitioners / Hospital Consultants etc as well as personal requests from patients (including Advance Directive notifications). Information regarding these requests is added to the Ambulance Dispatch Control system so that responding crews are pre-notified of DNACPR status when attending calls.

115. No notices were brought to the attention of the Trust during the relevant period regarding patients with a DNACPR notice in place. If any DNACPR request is received by the Trust which lacks relevant information then the Medical Director will contact the requestor to obtain further detail as required, but there has not been any concern raised regarding a change in the frequency of this action.

116. The Trust's reflections on the response of ambulance related services to the Covid-19 pandemic, including what worked well and any difficulties or challenges and what changes should be made are outlined in 'A Report on NIAS Learning from COVID', presented to NIAS Trust Board in October 2020 [INQ000281175]. Learning in NIAS was reflective of national learning across other ambulance Trusts. This review of learning included:

- Background to the review
- Methodology for the review
- Themed learning under various headings including – PPE; Communication; Operational Guidance; Fit Testing; IPC; Decontamination; Fit testing; COVID-19 testing; Operational Support Unit; Crisis Accommodation

- Operational learning through various NIAS functions – Emergency/ Non-Emergency Ambulance Control; Clinical Support Desk; Patient Care Services; Resource Management Centre (RMC)
- Medical Directorate Learning – Helicopter and Hazard Area Response
- Corporate Functions learning
- Risk Management learning
- Command Structures learning
- National learning

117. NIAS has undertaken post-pandemic debriefing sessions and identified learning from the pandemic and through our EPRR unit (Emergency Planning Response and Resilience) will apply learning, systems and processes that were developed through the Covid-19 pandemic.

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.

Personal Data

Signed: _____

Dated: 25 September 2023