Witness Name:	Jason Killens KAM
Statement No .:	2
Exhibits:	JK/01 – JK/192
Dated:	06 June 2024

UK COVID-19 INQUIRY

WITNESS STATEMENT OF JASON KILLENS

I, Jason Killens, provide this statement in my capacity as Chief Executive of the Welsh Ambulance Services NHS Trust ("WAST").

Preface

- 1. The impact of the Covid-19 pandemic was felt by all communities; those patients and bereaved families that the Welsh Ambulance Services NHS Trust ("WAST") responded to, seeking to provide the best care possible in the circumstances. WAST sadly experienced the death in service of four colleagues due to the Covid-19 pandemic ("the pandemic"). This had an impact on the colleagues of those who died and exacerbated the fear and anxiety felt by all at WAST especially in the early stages of the pandemic. The thoughts of everyone at WAST remain with all those impacted by the pandemic and particularly those families who lost loved ones.
- 2. Throughout the pandemic, WAST staff and volunteers continued to provide excellent care to patients at a time of fear, anxiety, and notable change in how WAST delivered its services. Everyone in the organisation demonstrated a continued commitment to the communities in which they served and their colleagues with whom they worked on a daily basis. In response to the pandemic, WAST personnel often worked over and above what was routinely expected of them, and at times when there was little known about the virus and the evolving situation with the pandemic. WAST personnel worked selflessly and professionally, often placing themselves, their families, and loved ones at risk to continue to provide compassionate, safe, and effective care to patients. I am

immensely proud of, and grateful to, all WAST personnel for their dedication to public service during such unprecedented times.

3. This statement is prepared to the best of my knowledge and belief. Insofar as matters in this statement are derived from my own personal knowledge, they are true. Where matters are not within my own personal knowledge, they are true to the best of my information and belief and derived from the sources stated and exhibited.

Introduction

- 4. This Statement is prepared in response to a Request for Evidence under Rule 9 of the Inquiry Rules 2006, received from Module 3 of the Inquiry, dated 03 April 2023. The Request has been sent to me in my capacity as Chief Executive Officer ("CEO") of WAST. It has been requested that I focus on the period from 01 March 2020 to 28 June 2022 (I will refer to this as "the specified period").
- 5. In preparing my statement I have found it helpful to consider the scope of Module 3 as set out by the Inquiry in August 2022. I note the scope is as follows:

"This module will consider the impact of the Covid-19 pandemic on healthcare systems in England, Wales, Scotland, and Northern Ireland. This will include consideration of the healthcare consequences of how the governments and the public responded to the pandemic. It will examine the capacity of healthcare systems to respond to a pandemic and how this evolved during the Covid-19 pandemic. It will consider the primary, secondary and tertiary healthcare sectors and services and people's experience of healthcare during the pandemic, including through illustrative accounts. It will also examine healthcare-related inequalities (such as in relation to death rates, PPE and oximeters)."

6. I have held the post of CEO at WAST since September 2018. Prior to this, I was the CEO of the South Australia Ambulance Service from September 2015. My ambulance sector career commenced in February 1996 with the London Ambulance Service NHS Trust ("LAS") as an operational/frontline Emergency Medical Technician. I concluded twenty years of service with LAS as Executive Director of Operations immediately prior to moving overseas. In nearly three decades of service in three countries/jurisdictions, I

have been responsible for ambulance sector response/provision at major planned events such as London's Notting Hill Carnival, Marathon, and New Year's Eve celebrations; the London 2012 Olympics and a range of serious and major incidents.

7. As CEO of WAST I am responsible for the safe and effective provision of urgent and emergency ambulance and healthcare services in the community and remote settings; non-emergency patient transport and delivery of the national urgent care telephone advice service (NHS 111 Wales). I am also expected to work collaboratively with a wide range of health, emergency service, local, regional, and national Government, and community stakeholders; develop and execute strategies to improve services provided in the community and the workplace experience for WAST personnel and maintain effective governance mechanisms to safely discharge the functions of WAST. At a formal level, my overall role, functions, and responsibilities as CEO remained largely the same throughout the specified period. However, these were heavily influenced by and geared towards WAST's pandemic response and managing the challenges that the pandemic created for us, as will be described in greater detail below.

A. An Overview of WAST

- 8. WAST was established in 1998, with NHS Direct Wales ("NHSDW") becoming part of WAST in April 2007. WAST is a clinically led organisation providing a service to approximately three million people across Wales, an area of almost 8,000 square miles, spread across a diverse and challenging urban, coastal and rural landscape.
- WAST is the sole national provider of 999 Emergency Medical Services ("EMS") in Wales, provides the call handling and clinical assessment and advice functions of the NHS 111 Wales service and provides a Non-Emergency Patient Transport Service ("NEPTS").
- 10. With regard to the statutory functions of the NHS in Wales including WAST, I would refer the Inquiry to the document prepared and agreed by the Welsh Government ("WG"), the Group of Welsh NHS Bodies and WAST for the purposes of Module 3 of this Inquiry. I exhibit this document called "The National Health Service in Wales: Agreed description of NHS in Wales between Welsh Government, the Group of Welsh NHS Bodies and the Welsh Ambulance Services NHS Trust" at Exhibit JK/01 – INQ000274845.

- 11. WAST decided early in the first wave of the pandemic to focus on its six priority and strategic service areas namely:
 - a. Ambulance response (emergency, urgent care, and non-emergency service) arrangements to generate additional capacity to respond to activity.
 - a. Fleet arrangements to ensure maximum fleet and equipment availability.
 - b. Information and Communication Technology arrangements to protect mission critical systems and support remote and flexible working.
 - c. Supply chain arrangements to ensure sufficient supplies of necessary items and materials such as Personal Protective Equipment ("PPE").
 - d. Resource Centre arrangements to facilitate greater numbers of staff being deployed and maintain core rostering services.
 - e. Clinical Contact Centre including EMS Clinical Contact Centre ("EMSCC") (999), the 111 Service, Clinical Support Desk ("CSD") and NEPTS Control arrangements to protect mission critical control functions, grow their capacity and diversify tasks.

In addition to these six core functions, WAST also ensured that its contractual arrangements were maintained, for example Mobile Testing Units ("MTUs").

- 12. This meant that some corporate staff were retrained and redeployed to these mission critical areas and to the pandemic response. Recruitment continued to support organisational growth as did associated training, with much of that training delivered virtually.
- 13. During the first wave of the pandemic, WAST's experience was that the demand for EMS and NEPTS reduced, whilst the demand for the 111 Service increased significantly. However, during the second and third waves, demand increased for EMS and again for the 111 service and remained high.

999/EMS

14. WAST manages between 1,000 and 2,000 emergency calls a day across Wales, and every year takes in the region of half a million emergency calls for 445,000 to 480,000 incidents (where a response to scene takes place) through three EMS Contact Centres in Wales. It provides several responses, including traditional double crewed emergency ambulances, solo car responders, urgent care vehicles, volunteer first responders, specialist teams and paramedics on bicycles or on foot in some cities. In total, WAST has over 300 emergency service vehicles based in 90 ambulance stations across Wales. In addition, clinicians based at these centres can offer remote clinical assessments, advice, and onward referral over the phone.

The 111 Service

- 15. WAST provides the call handling, clinical assessment, and advice functions to around 1,000,000 callers per year as part of the 111 service. Non-clinical call handling staff record details from callers and assess their clinical needs, connecting them to the right care and/or provide advice, supported by decision support software. If required, a nurse, paramedic or dental nurse will remotely assess the patient's issue and provide a resolution or refer the caller to another pathway which meets their needs. In the out-of-hours period, this includes referrals to the relevant Welsh Health Boards' out-of-hours service ("OoH"). The service also has a team of Health Information Advisors who provide other non-clinical advice for callers.
- 16. Four of the seven Health Boards had transitioned from NHSDW to the 111 service prior to the pandemic. The 111 Service is a free of charge call, whereas the NHSDW '0845' number was chargeable. In the first wave, the 111 Service was made available nationally in all Health Board regions for Covid related contacts so everyone could avail themselves of the free call and centralised advice. In September 2020 Cwm Taf Morgannwg transitioned from NHSDW to the 111 service, Betsi Cadwaladr followed in June 2021, followed by Cardiff and Vale in March 2022. This completed the roll out of NHS 111 Wales within Wales. The extra demand arising as result of this expansion equated to 9,593 calls per month. Ahead of the expansion into each Health Board a full readiness assessment was completed to ensure the service was appropriately positioned to manage the new demand, this process was overseen externally to WAST in the 111 Programme Board (Exhibit JK/187 (INQ000410474), Exhibit JK/188

(INQ000410475) and Exhibit JK/189 (INQ000410476)). The 111 Service website received more than 350,000 visits per week in the first few weeks of the pandemic.

- 17. To respond to the increasing demand, WAST required additional staff, which involved the recruitment of new staff, agency staff and redeployment of staff from corporate services to almost double call handler capacity. The method of redeployment was refined during the three waves of the pandemic. The 111 Service estate was also quickly expanded to incorporate social distancing requirements and additional personnel. WAST also introduced a new and faster front end call assessment process enabling higher volumes of calls to be managed within existing capacity and improved call handling technology utilising numeric options on call connection to signpost callers quickly to the pathway they needed (known as interactive voice response). Staff who were able to work from home were provided with equipment to enable this and WAST rapidly embraced the roll out of Microsoft 365 which facilitated a smoother transition to virtual working.
- 18. An entirely new fitness to work function for patients was introduced to the 111 service during the early stages of the pandemic, enabling members of the public to provide their employers with necessary certification when this was required. A web-based symptom checker for Covid-19 allowed users to check their symptoms and receive self-care advice to avoid the need to contact the 111 service or another healthcare provider via the telephone. Additionally, where appropriate the symptom checker issued a self-isolation note for all those who qualified, again reducing telephony demand on the 111 service and the wider urgent and primary care system.
- During the relevant period, the 111 Wales website saw 1,558,676 users start a Covid symptom checker. Of these, 814,968 (52%) individual uses of the symptom checker were completed, with 603,190 (74%) resulting in the patient being able to care for themselves.
- 20. As new national guidance was received, the Covid symptom checker (including Welsh translations) was reviewed and updated by Practice Coaches and the Patient Experience and Community Involvement ("PECI") team, and clinically approved through existing governance routes, before being released by the web developer team to the

site. See **Exhibit JK/192 (INQ000373102 – INQ000373103)**. All proposed changes made to the symptom checker were discussed and agreed by the Clinical Prioritisation Assessment Group (CPAS). A record of the changes that were effected during the pandemic period is shown in **Exhibit JK/186 (INQ000410473)**.

- 21. Performance of the Covid symptom checker was monitored by the web team on a daily basis, with usage of the flow and its dispositions being reported internally, and later to Digital Health Care Wales ("DHCW") and Welsh Government colleagues.
- 22. During the same period, 205,436 self-isolation dispositions/outcomes were advised by the symptom checker, which equates to approximately 25% of all completed flows, and 34% of all self-care outcomes.
- 23. The 111 website did not directly integrate with the 111 service, meaning that users did not need to enter any personal information to use the Covid symptom checker, so it was not possible to verify adherence with the advice and outcomes. Although abandonment and completion rates of the symptom checker were monitored, it was not possible to explicitly quantify the impact this had on 111 demand (positively or negatively), nor if the individual user presented to 111 or elsewhere in the system (as advised or despite selfcare advice).
- 24. From a technological perspective, there were no mechanisms to monitor or prevent misuse of the system by the public for example editing their responses to the symptom checker to get a particular outcome. To achieve such a conclusion, one would need to match up online demand with telephony demand and evaluate whether the service was being used appropriately (e.g. if a user presents via telephony, did this align with advice they were given online prior to calling) or by having online profiles or accounts. However, we were (and are still) not able to follow a single user through from their online journey to any other NHS Wales system interaction. This is planned future work.

<u>NEPTS</u>

25. NEPTS provided transport to patients with planned journeys to and from treatment facilities and clinics across Wales. In 2019, the service completed more than 650,000

journeys using different modes of transport ranging from taxis, volunteers, to nonemergency ambulance transport vehicles.

26. From the beginning of the pandemic, the service saw a significant drop in activity as a result of reductions in the volume of planned care and outpatient appointments delivered by Health Boards. Furthermore, fewer patients were able to be transported per vehicle because of social distancing requirements. NEPTS activity began to return to prepandemic levels once the national restrictions were eased.

Mobile Testing Units

- 27. Commencing September and October 2020, WAST deployed four Welsh Surge Test Trace Protect ("TTP") MTUs, mobilising a predominantly temporary workforce to provide community-based PCR and later some Lateral Flow Tests ("LFTs"). This service provision continued through to the end of March 2023.
- 28. The MTUs were deployed at different locations across Wales to complement static testing sites. The locations for testing were determined by the various Health Boards, in collaboration with the Welsh TTP service. Members of the public were directed to the most appropriate MTU following contact with the TTP service. Since deployment began, the MTUs saw 73,128 Polymerase Chain Reaction ("PCR") tests undertaken, 1,324 LFT tests completed and 7,069 LFT kits provided for home testing. This was an entirely new role that WAST stepped into and mobilised during the pandemic. The MTU capability afforded TTP a more reactive solution compared to static testing sites provided by others. The contracting arrangement for MTU, whilst supported by TTP, was by the Department for Health and Social Care.

B Structures, Roles, People and Processes

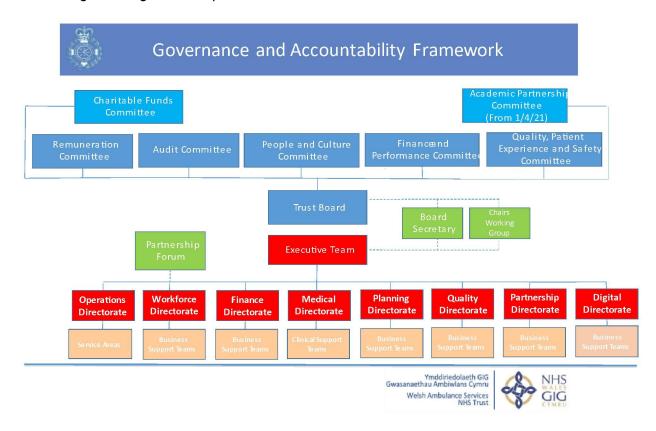
29. WAST is a statutory body and throughout the specified period was led by a Board of Directors (Trust Board) comprising: a Chair, a Vice Chair, six Non-Executive Directors excluding the Chair and Vice Chair, a Chief Executive, an Executive Director of Finance and Corporate Resources, an Executive Medical Director, an Executive Director of Quality and Nursing as well as an Executive Director of Workforce and Organisational Development. During the specified period, the Board included the following non-voting

members: a Director of Operations, a Board Secretary, a Director of Digital Services, a Director of Partnerships and Engagement, a Director of Strategy, Planning and Performance, a Director of Paramedicine (formerly Associate Director until November 2021), and two Trade Union Partners. The composition of the Trust Board remained the same throughout the specified period.

- 30. During the specified period, the above roles were filled by the personnel set out in the below text, extracted from the Annual Performance Report ("APR") 2020/21, which I exhibit later in this statement. Descriptions of the roles and responsibilities of these individuals during the relevant period are set out in the relevant job descriptions, exhibited to this witness statement as Exhibit JK/02.01 JK/02.13 (INQ000372950 INQ000372962).
- 31. Beneath the Trust Board sit the Directorates. During the specified period, these were: Operations Directorate, Clinical Directorate, Quality and Nursing Directorate, Planning and Performance Directorate, Digital Directorate, Partnerships and Engagement Directorate, Workforce & Organisational Development Directorate, Finance & Corporate Resources Directorate and Corporate Governance Directorate.
 - An overview of the Operations Directorate and a summary of the job roles within it are exhibited to this statement as Exhibits JK/03.01 JK/03.22 (INQ000372963 INQ000372967; INQ000372959; INQ000372969 INQ000372984) and Exhibit JK/04 (INQ000372985) respectively.
 - b. The structure of the Clinical Directorate and a summary of the job roles within the Clinical Directorate are exhibited to this statement as Exhibit JK/05.01 – JK/05.12 (INQ000372950; INQ000372987; INQ000372951; INQ000372989; INQ000372952; INQ000372991 – INQ000372997) and Exhibit JK/06 (INQ000372998) respectively.
 - c. The structure of the Quality and Nursing Directorate is set out in Exhibit JK/07.01 JK/07.02 (INQ000372999 INQ000373000) and the relevant role summaries for the specified period are set out in Exhibit JK/08.01 JK/08.02 (INQ000373001 INQ000373002).

- d. The structure of the Strategy Planning and Performance Directorate is set out in Exhibit JK/09 (INQ000373003) and the relevant role summaries for the specified period are exhibited as Exhibit JK/10.01 – JK/10.04 (INQ000373004 – INQ000373005; INQ000372955; INQ000373007).
- e. During the specified period, the Digital Directorate management structure was composed of the Director of Digital Services; the Head of ICT; the Head of Health Informatics, the Head of Operational Communications Programme, and the ICT Programme Manager. The relevant job summaries are exhibited to this witness statement as Exhibit JK/11.01 JK/11.06 (INQ000372953; INQ000373009 INQ000373013). The Head of Health Informatics ("HI") left the Trust in April 2021 and existing HI senior managers provided digital leadership input for health informatics during the intervening period between April 2021 and March 2022 when an Assistant Director of Digital Services: Data and Analytics was appointed.
- f. The Partnership and Engagement Directorate was led by the Director of Partnerships and Engagement. The job description for the Director of Partnership and Engagement is exhibited to this witness statement as Exhibit JK/12 (INQ000372957).
- g. An overview of the Workforce and Organisational Development ("WOD") Directorate and a summary of the relevant job roles is exhibited to this witness statement as Exhibit JK/13.01 – JK/13.06 (INQ000373015; INQ000373016; INQ000373018; INQ000373023; INQ000373024 and INQ000373026). Additionally, there was a role of Senior Workforce Transformation Strategy and Planning Lead, however, the job description for this role is not available as the role no longer exists.
- h. The structure of the Finance & Corporate Resources Directorate is set out in Exhibit JK/14.01 – JK/14.06 (INQ000373027; INQ000372958; INQ000373029 – INQ000373032) and the relevant role summaries for the specified period are set out in Exhibit JK/15 (INQ000373033).

- i. The Corporate Governance Directorate was composed of the Board Secretary and the Head of Risk and Corporate Governance, the job descriptions and role summaries for which are exhibited to this witness statement as Exhibit JK/16.01 – JK/16.03 (INQ000372962; INQ000372954; INQ000373036) and Exhibit JK/17 (INQ000373037) respectively.
- 32. Prior to the pandemic, WAST's organisational structure was as shown in the "Governance and Accountability Framework" (Exhibit JK/18 (INQ000373038)). The diagram at figure 1 is reproduced here for convenience.



- 33. WAST's Executive Team considered the global, European and United Kingdom context on several occasions during February 2020, most notably on 04 February 2020 when a pandemic table-top exercise was initiated to review existing plans and capacity.
- 34. As a result, WAST Executives were of the view that it was appropriate in the circumstances to informally trigger the organisation's existing Pandemic Influenza Plan

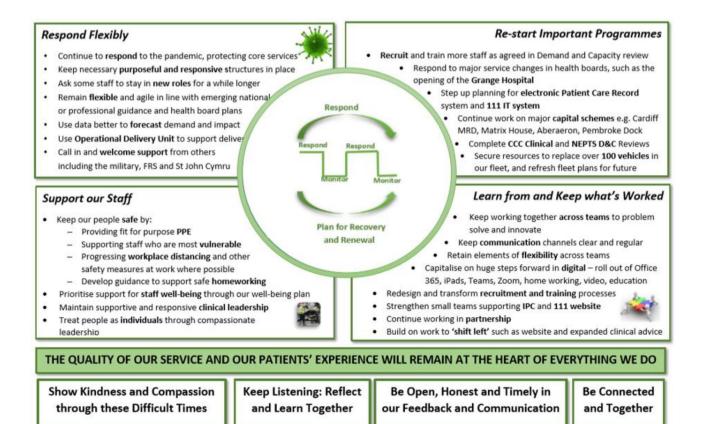
("PIP") (version 15.7, dated February 2020) and, in so doing, enable the establishment of a clear operational response structure, charged with the rapid development of the organisation's pandemic delivery plans.

- 35. Until early March 2020, while extensive planning was undertaken, the informal status of the PIP remained. However, the potential impact of Covid on Wales was becoming increasingly obvious and on 04 March 2020 I, as the Chief Executive, with the support of the Executive Team and the Trust Board formally triggered the arrangements within the PIP, approving the organisation's pandemic strategy.
- 36. In taking this step, two clear corporate objectives were set and communicated widely. These were to:
 - a. Take all reasonable, necessary, and proportionate measures in all the circumstances to fulfil the objectives set in the pandemic strategy; and
 - b. Continue with recruitment to fulfil the minimum of 136 whole time equivalent (WTE), growth of the EMS as agreed with commissioners for 2020/21. This was to ensure that the organisation's long term workforce viability and performance could be secured, recognising that it would be naive to compromise key future planning while being mindful of the imminent and likely impact of a pandemic.
- 37. As a result of these decisions, other 'non-essential' WAST activity, such as (but not limited to) service planning activity (whereby we work internally and externally with other NHS bodies to develop strategic plans in relation to service change), delivery of projects and programmes within our integrated medium term plan (such as the electronic patient record programme, capital schemes at Cardiff MRD and Matrix House, and reviews of rosters in our contact centres and non-emergency patient transport teams) training (not aligned to the pandemic strategy or recruitment of an additional 136 full-time equivalent ("FTE") frontline staff), as well as general administrative tasks for example, secretariat support for meetings that was paused in our directorates to enable a focus on these areas. A coordination and accountability structure was established to facilitate this. This was led by twice-weekly meetings of the Executive Pandemic Team ("EPT"), supplemented by several ad-hoc EPT meetings required in the early stages of the pandemic to permit an agile response to the evolving situation.

- 38. The EPT was composed of myself, the Chief Executive (Chair), Brendan Lloyd who was Executive Medical Director/Deputy Chief Executive (Interim), Christopher Turley who was Executive Director of Finance and Corporate Resources, Estelle Hitchon who was Director of Partnerships and Engagement, Lee Brooks who was Director of Operations (Chair of the Tactical Pandemic Team "TPT"/Senior Pandemic Team "SPT"), Keith Cox who acted as Board Secretary (Evidence Records Officer), Claire Vaughan who was Executive Director of Workforce and Organisational Development, Rachel Marsh who was Director of Strategy Planning and Performance, Claire Roche who was Executive Director of Quality and Nursing, Andy Haywood who was Director of Digital Services, Andy Swinburn who was Associate Director of Paramedicine. Also in attendance was Chris Sims, the Head of Resilience (Strategic Advisor), Rachel Watling, Head of Communications and Jonathan Jones, Assistant Corporate Secretary. This structure and the functions of the EPT were set out within the PIP v15.7 dated February 2020 (Exhibit JK/19 (INQ000373039)), the WAST Pandemic Strategy which was signed on 14 March 2020 and associated EPT membership (Exhibit JK/20.01 - JK/20.02 (INQ000373040 – INQ000373041)), all of which are exhibited to this witness statement.
- 39. During the first wave of the pandemic, the Tactical Pandemic Team ("TPT") forum comprised of the Director of Operations, (Chair); the Associate Director of Paramedicine (Deputy Chair); Chairs of the Pandemic teams reporting to the Senior Pandemic Team ("SPT"); the Assistant Directors of Operations; a Partnership and Engagement Representative; a Workforce and Organisational Development representative; and a Business Continuity and Recovery Team representative. This forum was later renamed as SPT during the second and third waves of the pandemic, and in the third wave the membership updated to reflect the change in the Chair from the Director of Operations to the Assistant Director of Operations, with the Assistant Director of Research, Audit and Service Improvement (Deputy Chair). The Terms of Reference for the TPT (Exhibit 21.01 - JK/21.03 (INQ000373042 - INQ000373044)) and the SPT (Exhibit JK/22.01 -JK/22.03 (INQ000373045 - INQ000373047)) and the structure and the functions of these groups are set out within the Action Card on page 38 and 39 of the PIP version v15.7 dated February 2020, which is exhibited to this witness statement at Exhibit JK/19 (INQ000373039).

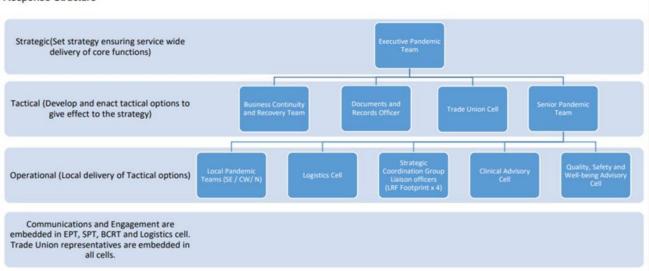
- 40. Key to the development of WAST's response plans was the scale to which service delivery would be impacted by anticipated increases in activity, staffing constraints through sickness or isolation absence, and service disruption because of other external factors, such as interruption to the supply chain as the pandemic had a significant impact on the global supply chain in terms of availability, price, and lead times on a wide range of items. From WAST's perspective, general clinical consumables, and in particular respiratory protective equipment ("RPE") and personal protective equipment ("PPE"), were affected by unprecedented global demand, pressures on production capacity and lack of resilience in the transport element of the supply chain (both in terms of global shipping due to port closures, and domestically due to staffing constraints). This was further exacerbated by government decisions such as a restriction on medical exports by China, and by the reallocation of inventory by USA manufacturers from Europe to the USA.
- 41. On that basis, some assumptions had to be made, working on national reasonable worst case ("RWC") scenario modelling, and on the experience of other ambulance services operating in areas ahead of the Welsh pandemic curve, notably London Ambulance Service ("LAS").
- 42. Additional modelling capacity was commissioned in a bid to understand the impact of a potential rise in demand. However, it was agreed that in order not to delay the mobilisation of available additional capacity, the six key areas of WAST business described above at paragraph 10 would be prioritised.
- 43. The intention was to protect and strengthen those areas of WAST's work that would be most closely aligned with maintaining personnel safety and patient care.

44. With that in mind, WAST's Covid-19 Operating Plan for 2020/21 Q1 (published in May 2020) was as follows:



45. The flexible response actions detailed in the diagram above were operationalised through a Command, Control and Coordination ("C3") structure as set out in the Pandemic Plan. This was led by twice-weekly meetings of the EPT and supported throughout by the Emergency Preparedness, Resilience & Response (EPRR). An example of the pandemic decision-making structure adopted by the organisation is shown in the diagram below:

Response Structure



- 46. In normal business WAST does not operate in this way. The leadership is ordinarily less directive, and the emphasis is on local management. The pandemic structure initially shifted that emphasis to one of more direct command and control which was nuanced as the pandemic progressed and lessons were identified. The C3 structure was not subject to staff consultation but would have been shared through communication channels such as WAST Live sessions and Daily Bulletins. Of importance to staff was not the C3 structure itself, but the channels open to them locally for advice and support regarding the development of response actions. This was effected, for example, via the Local Pandemic Teams ("LPT"). Staff had available to them through a number of sources, the contact details of the LPT any other structure responsible for the pandemic response.
- 47. I am asked about the resourcing of WAST and how this changed during the pandemic. As to the number of ambulance clinicians and support staff employed by WAST, this is addressed in detail below. In March 2020, WAST had a fleet of 767 vehicles, comprising 269 EMS vehicles, 134 Rapid Response Vehicles, 278 NEPTS vehicles, 23 unmarked pool vehicles, 31 vehicles used by either the Hazardous Area Response Team ("HART") or that of a major incident response, and 32 Specialist vehicles comprising of Training, Fleet and Make Ready support vehicles as well as Occupational Health Vans with clinical space and cycle response vehicles. The Executive Director of Finance and

Corporate Resources was responsible for overseeing and leading on the vehicle procurement function.

- 48. During the specified period, the response time target set by Welsh Government, and other indicators and measures set by commissioners for WAST remained the same in respect of 999, the 111 service and NEPTS. Targets were set by the Welsh Government, as per the NHS Wales Delivery Framework 2020-2021 (Exhibit JK/170 (INQ000410448)). I am not aware that there was any change to the targets because of the pandemic, but public reporting of WAST's performance was suspended as per the letter received from Welsh Government dated 01 April 2020 (Exhibit JK/171 (INQ000468950)) and Welsh Government guidance dated 03 April 2020 detailing reporting priorities and reduced performance management during Covid-19 (Exhibit JK/172 (INQ000227380)). Reporting was subsequently resumed on the 19 November 2020, with retrospective reporting for the period 01 April 2020 to 30 September 2020.
- 49. The NHS Wales Delivery Framework for 2020/21 contained a total of seventy-eight indicators ("targets"), but only fourteen of these applied to WAST. Of these fourteen indicators, there are two key ones that relate to patient facing activities, the others focus on non-patient facing targets such as staff appraisals, sickness absence and agency spend for example. The two key patient-facing measures are:

1) Ref. 19 - Percentage of Out of Hours (OoH)/111 patients prioritised as P1CHC that started their definitive clinical assessment within 1 hour of their initial call being answered (target 90% monthly); and

2) Ref. 20 - Percentage of emergency responses to red calls arriving within (up to and including) 8 minutes (target 65% monthly); and

50. Ambulance services (111 was not a commissioned service during the pandemic period) in Wales are commissioned by Health Boards via the Emergency Ambulance Services Committee ("EASC"). EASC has developed a set of Ambulance Quality Indicators ("AQIs"), which incorporate the Welsh Government targets (2 Ref. 20 above), but in addition sets further targets. The AQIs are referred to in the letter of 01 April 2020 from Andrew Sallows (Delivery Programme Director, Welsh Government Health and Social Services Group) (Exhibit JK/171 (INQ000468950)) and are outlined in the following

table. The EASC target is 95% for each, except for the return of spontaneous circulation ("ROSC"), which has no target.

AQI16 i	Percentage of patients with attempted resuscitation following cardiac arrest, documented as having a return of spontaneous circulation (ROSC) at hospital door
	Number of patients with attempted resuscitation following cardiac arrest, documented as having a return of spontaneous circulation (ROSC) at hospital door
	Total Number of patients with attempted resuscitation following cardiac arrest
	Percentage of suspected stroke patients who are documented as receiving appropriate stroke care bundle
AQI16 ii	Number of suspected stroke patients who are documented as receiving appropriate stroke care bundle
	Total Number of suspected stroke patients
	Percentage of older patients with suspected hip fracture who are documented as receiving appropriate care bundle
	[including analgesia]
AQI16 iii	Number of older patients with suspected hip fracture who are documented as receiving appropriate care bundle
	Total Number of older patients with suspected hip fracture
	Percentage of older patients with suspected hip fracture who are documented as receiving analgesia
	Number of older patients with suspected hip fracture who are documented as receiving analgesia
	Total Number of older patients with suspected hip fracture
	Percentage of ST segment elevation myocardial infarction (STEMI) patients who are documented as receiving appropriate STEMI care bundle
AQI16 iv	Number ST segment elevation myocardial infarction (STEMI) patients who are documented as receiving appropriate STEMI care bundle
	Total Number of ST segment elevation myocardial infarction (STEMI) patients
	Percentage of suspected sepsis patients who have had a documented NEWS score
	r cicentage of suspected sepais patients who have had a documented news score
AQI16 v	Number of suspected sepsis patients who have had a documented NEWS score
	Total Number of suspected sepsis patients
	Percentage of patients with a suspected febrile convulsion aged 5 years and under who are documented as receiving the
	appropriate care bundle Number of patients with a suspected febrile convulsion aged 5 years and under who are documented as receiving the
AQI16 vi	appropriate care bundle
	Total Number of patients with a suspected febrile convulsion aged 5 years and under
	Percentage of hypoglycaemic patients who are documented as receiving the appropriate care bundle
AQI16 vii	Number of hypoglycaemic patients who are documented as receiving the appropriate care bundle
	Total Number of hypoglycaemic patients

51. WAST's funding for the operation of the ambulance service comes from a range of sources. WAST derives most of its income from NHS Commissioners - Emergency Ambulance Services Committee ("EASC") / Chief Ambulance Services Commissioner ("CASC") predominantly for EMS, NHS Direct ("NHSD"), Clinical Contact Centres ("CCCs") and for Ambulance Care Services (including NEPTS). Income is also received from Welsh NHS bodies - for '111' services and for items such as locally delivered services covering cardiac, neonatal clinical transport & dedicated discharge services. In addition, the Welsh Government provides direct funding for the HART, Special Operations Response Team ("SORT") & Chemical, Biological, Radiological & Nuclear ("CBRN") operational functions, Research & Development funding, support to Personal Injury Benefit Cases ("PIBS") & non-recurrent support for exceptional cost pressures and Covid-19 costs. Further income is also provided by a combination of English NHS organisations purchasing ambulance care services, research funding from universities, funding for continuation of MTUs & income from road traffic incidents.

- 52. Each year the WAST budget is set by the Finance Department working with all budget holders to set the required funding envelope to deliver services net of any required savings. The overall planned expenditure for the year is then led by the Executive Director of Finance & Corporate Resources and set by Executive Management Team ("EMT") finally then being approved by the Trust Board and submitted to Welsh Government. Prior to the pandemic, any expenditure over £250,000.00 required Trust Board approval. While there were proposals for the threshold to be raised temporarily during the pandemic, WAST did not do so. WAST was agile in its use of Chair's actions within its Standing Financial Instructions (SFIs) and was able to convene Trust Board meetings virtually to facilitate these. As such, WAST did not consider the raising of the threshold to be necessary. Subsequently however, there has been a change and the threshold at which Trust Board approval is required is now £500,000.00.
- 53. The standing orders are reviewed annually by Welsh Government. Amendments to the standing orders, standing financial instructions and scheme of reservation and delegation of powers were approved by the Trust Board on 27 January 2022 (Exhibit JK/23.01 JK/23.13 (INQ000373048 INQ000373061)). In several areas, the delegated limit of the CEO was increased from £250K to £500K and the Trust Board thresholds were correspondingly increased. This was welcomed by the Audit Committee as limits had been at £250K for some time, necessitating several Chair's actions for approvals as a result. Increasing the limit ensured that the increased limit was more reflective of inflation and reduced the need for Chair's actions, whilst not eliminating them entirely.

- 54. During the pandemic and for pandemic associated costs, WAST operated on a spend and recover basis. WAST was not provided with a given amount of money for the Covid response. WAST sought approval for any large expenditure, always being mindful that the Trust Board were custodians of public funds and providing value for money. For example, when WAST doubled the 111 service capacity over the course of the pandemic, this required a new control room to be built. As such, the Trust Board were notified of this requirement, and approval was sought from Dr Andrew Goodall (Director General of Health) prior to committing these funds - please refer to WAST's Capital Funding approval letter dated 10 November 2020 (Exhibit JK/24 (INQ000373062)), and an SBAR (Situation, Background, Assessment, and Recommendation) report dated 11 November 2020 on the Phone First Capital Scheme which was presented to the Trust Board (Exhibit JK/25 (INQ000373063 - INQ000373064)). The use of the Military in their assistance to the civil authority role also incurred significant costs. The costs related to WAST's permanent staff establishment, so permanent staff growth was determined by and met by WAST commissioners. Connected to the Demand and Capacity review completed in 2019, WAST secured additional funding for baseline staff numbers to grow.
- 55. In the 12 months to March 2021, WAST incurred additional Covid-related costs of approximately £13.9 million as is detailed on item 7 on page 3 of **Exhibit JK/26** (INQ000373065). The largest expenditure was in the first year of the pandemic. In the second year there were still ongoing Covid-related costs such as additional cleaning and PPE (see item 6 on page 2 of **Exhibit JK/27** (INQ000373066). Much of these additional costs over the specified period were made up of sundries, and the two 'big ticket' items were workforce costs in respect of the use of the Military and the expansion of the WAST estate for the control and capacity increases necessitated by WAST's pandemic response. WAST did not experience any issues from the Welsh Government in respect of recovering Covid-related expenditure, with all such costs being funded in the relevant financial year.

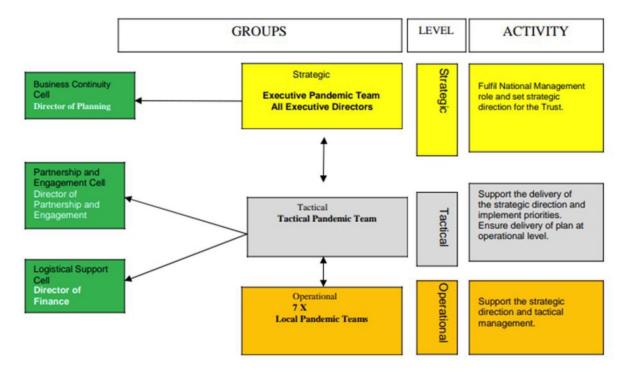
C An Overview of WAST's Response to the Pandemic

Policies

56. As I stated above, WAST's PIP was informally triggered in February 2020 and formally triggered on 04 March 2020. I think that WAST's early triggering of the PIP was one of the key things that WAST did well in response to the pandemic. This was recognised in

the Structured Debrief Report after the first wave, dated 23 July 2020, which I exhibit at **Exhibit JK/28 (INQ000360404)**.

- 57. The PIP encompassed the risks and difficulties posed by the combination of increased activity and reduced capacity through, amongst other things, staff absence. As such, it included the means of increasing resource capacity and organisational capability through, for example, engaging with voluntary and independent sectors, reducing the need for staff to engage in non-essential activity and re-deploying staff. The PIP also included means of reducing activity through the REAP, Demand Management Plan ("DMP") and Protocol 36, which is discussed in more detail further below.
- 58. The PIP also provided for some organisational restructuring, with the establishment of the EPT, Tactical Pandemic Team ("TPT") which became the Senior Pandemic Team ("SPT") in the second wave, and so on. As part of this, the PIP provided for the establishment of three 'cells' to support the command structures with logistical, informatics, communications, and business continuity support. The cells were the Business Continuity Cell ("BCC"); Logistics Cell ("LC"); and Partnerships and Engagement Cell ("PEC"). The structure provided for by the PIP was captured in the following table:



- 59. The PIP also provided for the establishment of a Pandemic Flu Evidence and Records Officer ("PFERO") who was to *"collect and collate logs, evidence and information ready for the consequence phase of the incident"*, including Public Inquiries. This was a responsibility held by the Board Secretary.
- 60. In all, the pandemic response structures allowed for rapid decision making and agile governance. WAST was, accordingly, able to focus on front line service delivery and recruitment in anticipation of the increased demand and decreased capacity which it was likely going to face.
- 61. In reality the Covid-19 National Command, Control and Coordination ("C3") Structure that came to be implemented was much more comprehensive than that outlined within the PIP and included EPT as Tier 1, with Business Continuity Cell ("BCC"), Trade Union Cell ("TUC"), and TPT in Tier 2, and the following supporting cells in Tier 3:
 - a. Incident Coordination Cell ("ICC")
 - b. Local Pandemic Teams (x3) one per region
 - c. Local Pandemic Team CCC and 111
 - d. Logistics Cell ("LC")
 - e. Strategic Coordinating Group Liaison ("SCG") Local Resilience Forum ("LRF") footprint)
 - f. Infection Prevention and Control ("IPC") and Clinical Advisory Cell ("CAC")
- 62. LRFs are multi-agency partnerships made up of representatives from public services in a geographic area. During the pandemic the LRFs stood up their Tactical Coordination groups (TCGs) and Strategic Coordination Groups (SCGS) at which WAST was represented.
- 63. This reflected changes that were made to WAST's structures throughout the initial phase. For example, whilst provided for in the PIP, the PEC was in fact disestablished within 24 hours. Instead, communications colleagues were embedded in the other operational cells to provide advice and guidance, as well as to gather and share intelligence, and ensure a streamlined approach to communication. Similarly, as set out above, IPC was initially dealt with by the CAC. A bespoke IPC cell was then formed, as well as separate Health Safety and Wellbeing Advisory Cell ("HSWAC"). These two cells

were later merged to become the Quality, Safety and Well-being Advisory Cell ("QSWC").

- Following a structured debriefing process after the first wave of the pandemic, WAST's PIP was rewritten in May 2020, approved, and issued on 22 September 2020 (Exhibit JK/29 (INQ000373068)).
- 65. The PIP as at 01 March 2020 provided detailed planning assumptions around numbers and percentages of the population who may be affected and around the timings of initial and subsequent waves. Some of these assumptions, for example in relation to staff absence, had been reasonably accurate and assisted in WAST's response. However, the first wave of the pandemic had demonstrated that some of the other assumptions, for example around the duration of a flu pandemic and the timing of waves, would be entirely inapplicable. Accordingly, whilst carefully considered planning assumptions featured in the September 2020 plan, the suggested numbers, percentages, and timings which featured in the March 2020 PIP were not fully reproduced.
- 66. Otherwise, one of the most important changes from the March 2020 PIP to the new Pandemic Plan ("the Plan") issued in September 2020, was the formalisation of the changes to the WAST pandemic response structures which happened during the initial phase (discussed above). The Plan issued in September 2020 accordingly included three cells which were not in the PIP: the CAC; the QSWC; and the TUC.
- 67. The PIP as it existed in March 2020 was designed to be "sufficiently flexible to account for the unknown epidemiology of a pandemic" (paragraph 2.2). However, one of the lessons identified during the first wave of the pandemic was the importance of clinical advice. The Plan as at March 2020 was based on a flu pandemic, which was a known disease. Covid-19 was a new and unknown virus. At the outset, there was a lack of knowledge around how it was transmitted, how it should be treated, and its mortality risk. Clinical involvement and input therefore became crucial in the first wave of the pandemic to keep abreast of the changing clinical picture and to feed this into the command structure described in the sections above.
- 68. As a result, the Plan issued in September 2020 came to include the CAC in the pandemic response structure to provide clinical advice to the EPT and SPT. The function of the

CAC included, amongst other things, the review and consideration of national guidance, and the consideration of WAST's position on a variety of clinical matters.

69. Similarly, the need for a dedicated QSWC became clear during the first wave of the pandemic, given the toll it had taken on WAST staff. An update to staff announcing what was then termed HSWAC was sent on 25 March 2020 (Exhibit JK/30 (INQ000373069)). The QSWC's remit included staff well-being, health and safety and infection prevention and control, so the QSWC provided a platform for such matters to be addressed. The following was noted in WAST's Structured Debrief Report dated 23 July 2020 (exhibited above at Exhibit JK/28 (INQ000360404):

"This incident has not been the normal type of incident, that WAST has responded to in the past, consideration needs to be given to supporting our staff's mental and physical wellbeing, post this incident and in preparation for further phases".

- 70. Another lesson identified in the first wave of the pandemic, in the context of significant changes to the ways of working, was the importance of maintaining a focus on industrial relations. It was recognised in the EPT meeting on 09 March 2020 that WAST's Trade Union partners needed to be engaged in pandemic planning and it was agreed that representatives be invited to the BCC, LC and PEC. As such, the creation of the TUC in the September 2020 Plan formally acknowledged the cooperation necessary between WAST and Trade Unions during the pandemic to ensure the efficacy of the service being provided by WAST.
- 71. The TUC, as set out in the Plan, was to include an EPT representative and likewise, members of the TUC were to sit on several of the other WAST pandemic groups. The TUC, therefore, provided a platform for Trade Union members to meet and to then raise any identified issues, with any related recommendations, to the EPT, via the EPT representative. Examples of issues raised by the TUC included PPE concerns relating to the FIT testing of various face masks, the supply chain and clear guidance and instructions on the levels of PPE required when dealing with certain patients and environments; recording, reporting and pay during a period of covid absence, management and support for employees off work with long covid; risk assessments for BME and vulnerable employees; guidance for shielding and isolating employees due to covid as well as the carrying over of unused annual leave due to service demand.

- 72. Guidance from NHS Employers evolved throughout the pandemic on the provision of pay for staff off due to contracting covid, isolating and being classed as venerable. The guidance regularly required updating and communicating across WAST. Discussion routinely took place at the TUC to provide clarity on changes and provide a WAST lens.
- 73. Actions cards developed to support managers and staff on a range of covid related issues were routinely updated and discussed at the TUC. As a result of frequent changes communicating updated action cards sometimes became a challenge with updates not reaching all parts of WAST as quickly as other areas. Trade Union colleagues used the TUC to raise inconstancies of processes being followed which enabled managers to address these promptly. The TUC could also review staff related issues arising in the other pandemic groups in which they were represented and make recommendations accordingly.
- 74. The new structure in the September 2020 Plan was in part the product of a further, somewhat unanticipated, feature of the pandemic, namely its protracted nature. The March 2020 PIP envisioned *"pandemic influenza activity"* that may *"last for three to five months"*. Indeed, this was one of the planning assumptions which was removed from the September 2020 Plan. As a result, as the pandemic became more protracted, the Plan flexed to merge 'command and control' terminology and structures with a structure that was more suited to a whole organisational and protracted management response, and which utilised the existing management structures.
- 75. A summary of this transition was set out in the November 2022 WAST Structured Debrief Report (**Exhibit JK/31 (INQ000360401)**). The PIP *"enabled a command structure to be implemented"* which was *"then adapted to a management response as the waves of the pandemic progressed and response became protracted"*.
- 76. Aside from the new structure and the three new cells, the other important change in the September 2020 Plan was an increased focus on internal, as opposed to external, communications. Before the pandemic, WAST's experience of major incidents had led to an appreciation of the importance of external communication and proactive engagement with the community. However, one lesson identified from the first wave was the importance of *internal* communication.

- 77. As such, the September 2020 Plan recognised the need for regular briefings to WAST staff and volunteers on the current pandemic situation, PPE requirements, clinical matters, and changes to WAST practices, changes to WAST policies and procedures and, as far as possible, the expected progression and outcomes of the pandemic. It also recognised the need to make use of all available means of communication, which is how traditional platforms like SharePoint were supplemented with the creation of a daily bulletin for staff to capture and relay up-to-the-minute information, as well as a virtual question and answer (Q&A) sessions with senior leaders coined 'WAST Live'.
- 78. The constant change of advice, often out-of-hours, required a diligent focus on internal communications to ensure staff and volunteers had the right information at the given time. Meanwhile, public-facing messaging was undertaken by WAST and its partners including Welsh Government, LRFs, and the Communications Team worked extended hours to relay these important messages. The early disestablishment of the PEC and its replacement with the embedding of communications team members within other main Cells was key to ensuring the smooth and accurate relaying and sharing of information to inform timely and accurate internal, and where appropriate, external communications.
- 79. The next version of the Plan was issued on 13 September 2021. The Plan had been reviewed in July 2021, following the debrief process after the second wave, and minor changes were made (**Exhibit JK/32 (INQ000373071)**).
- 80. As stated above, the PIP referred to WAST's Resource Escalation Action Plan ("REAP"). This existed before the pandemic but was updated in May 2020 to support the Plan and general response to the pandemic (Exhibit JK/33 (INQ000373072)). REAP is an organisational action plan and consists of four levels of escalation which reflect the pressure facing WAST at any given time. These range from "Steady State" (level 1) to "Extreme Pressure" (level 4). These levels are also recognised by the Welsh Government and Health Boards.
- 81. The Plan set out that the REAP level would be assessed weekly, so that timely action could be taken and to aid the identification of the factors that might be influencing the pressures facing WAST. REAP was updated throughout the pandemic and a new post-pandemic version was published in November 2022 in preparation for future pressures affecting service delivery (Exhibit JK/34 (INQ000373073)). Weekly REAP levels for

2020-2022 can be viewed at Exhibit JK/173.01 – JK/173.02 (INQ000410451 – INQ000410452).

- 82. WAST also operated a DMP (Exhibit JK/35 (INQ000373074)) later renamed the Clinical Safety Plan ("CSP") (Exhibit JK/36 (INQ000373075)) which deploys targeted intervention as and when activity/demand is greater than the capacity to respond. This manifests in the number of patients waiting for a response increasing. Its purpose was to deal with real time acute issues that were not likely to have a longer-term strategic impact, or which were limited geographically. It did this by providing a set of tactical options to enable WAST to ensure that emergency ambulances were targeted to those patients who were the sickest. As the CSP level escalates, lower acuity demand is managed in a different way or not subject to a response.
- 83. The DMP existed before the pandemic; however, was later updated and eventually became the CSP, version 1 of which was published on 02 September 2021. The DMP/CSP was assessed regularly which is consistent with the approach post pandemic. However, during the pandemic and depending whether Protocol 36 had been deployed and at which level, this would inform how WAST responded to these specific scenarios when in DMP 4,5 and 6 (Exhibit JK/174 (INQ000410453)), and CSP Level 3b, 4a and 4b. CSP (previous DMP) levels depend on the level of demand, with a range of actions that would be taken, for certain categories of calls (Exhibit JK/175 (INQ000410454)).
- 84. These tactics support WAST in being able to manage peaks of demand and determine our response to patients. There are differing levels of authority required to enact this plan and the review of CSP levels is a dynamic process undertaken by the Operational Delivery Unit ("ODU") with relevant management support at various levels.
- 85. WAST also introduced new policies in response to the pandemic. For instance, early in the pandemic, WAST outlined a Tactical Approach to Production ("TAP"). The first TAP was dated 27 March 2020 (Exhibit JK/37 (INQ000373076)) and then this was updated with various other TAPs over the course of the next two years (09 April 2020, 01 May 2020, 23 December 2020, 13 January 2021, 03 March 2021, 09 April 2021, 22 January 2022 and 03 March 2022) (Exhibit JK/38.01 JK/38.08 (INQ000373077 INQ000373079; INQ000275144 INQ000275145; INQ000373082 INQ000373084)).

- 86. The TAPs sought to maximise clinical front-line capacity, particularly in times of increased pressure, balancing the risk of changes to deployed clinical experience with the provision or otherwise of additional capacity, for example the TAP sought to achieve this aim by utilising non-clinical support from Fire and Rescue Services and the Military. The TAPs also recognised the role played by organisations such as St John Ambulance Cymru (SJAC").
- 87. Several other policies, plans, and guidance documents were introduced during the pandemic including:
 - a. Guidance for incidents involving suspected Wuhan Corona Virus (WN-CoV) (Exhibit JK/39 (INQ000373085)), which was first published in January 2020. This was for WAST staff responding to and dealing with incidents involving patients with suspected or confirmed Covid and later became WAST Guidance on Incidents Involving Covid-19 (Exhibit JK/40 (INQ000373086)), and then the Covid-19 Incident Response guidance (Exhibit JK/41 (INQ000373087)). These guidance documents covered matters such as the initial assessment and prioritisation to be conducted at the point of call, the face-to-face risk assessment to be performed before making contact with a patient, and the preparations to be taken for patient conveyance and vehicle decontamination.
 - b. Covid-19 Guidance on PPE was published on 05 May 2020 (Exhibit JK/42 (INQ000373088)). The purpose of this document was to give comprehensive guidance and information on infection protection and control as well as PPE requirements and practices in the context of Covid in a way which was specific to WAST staff. The guidance was regularly updated, and a second version was published on 25 January 2021 (Exhibit JK/43 (INQ000373089)).
 - c. Covid-19 Clinical Guidance v1.2 was published on 20 May 2020 (Exhibit JK/44 (INQ000373090)). This was one of the products of the increased clinical input in the pandemic response structures. Its purpose was to provide clinical guidance to staff in responding to and treating patients in the context of Covid.
 - d. Guidance on Major Incident Response during Covid was published in July 2020 and updated in August 2020 (Exhibit JK/45 (INQ000373091)). This was

designed to provide guidance in the event that WAST staff needed to respond to a major incident or mass casualty situation during the pandemic.

- e. Another document which was developed during the early months of the pandemic was WAST's Guidance for the Flexible Recovery from COVID-19 (Exhibit JK/46 (INQ000373092)), the purpose of which was to provide guidance on the transition from responding to the pandemic to monitoring it and then on to recovering from it. It was signed off at EPT in November 2020 and published on the WAST intranet.
- f. A COVID-19 Outbreak Management Standard Operating Procedure ("SOP") was published on 21 December 2020 (Exhibit JK/47 (INQ000373093)). The purpose of this document was to provide a SOP in the event of an outbreak of Covid amongst WAST staff members. The SOP was based on the lessons learned after an outbreak of Covid amongst the staff at Tredegar Ambulance Station.
 - On 11 November 2020, a cluster of COVID positive staff was identified at Tredegar Ambulance Station and Make Ready Depot ("MRD"). Tredegar Ambulance Station and the MRD are in the same location and, consequently, have a high footfall with up to 24 staff on site at any one time. Both areas had updated Covid–19 site specific risk assessments. Nine members of staff tested positive for Covid within a ten day period. In addition, the MRD at this time was a critical service as each vehicle which had an aerosol generating procedure ("AGP") performed required the vehicle to have a full decontamination with the use of the rapid sanitisation procedure. This could only be performed in the MRD, where the staff were specifically trained in its use.
 - ii. The SOP sought to set out the internal management processes to control and manage any future outbreak. In July 2022, this SOP was amended so that it was no longer Covid specific and could be utilised for any future outbreak of any infectious disease amongst staff (Exhibit JK/48 (INQ000373094)).

- g. A new Incident Response Plan ("IRP") was published in April 2021 (Exhibit JK/49 (INQ000373095 INQ000373096)) to replace what had previously been the WAST Major Incident Plan ("MIP"). The IRP was implemented on 24 May 2021. As a Category One Responder under the Civil Contingencies Act ("CCA") 2004, WAST is required to risk assess the likelihood of foreseeable emergencies and plan for them. The MIP therefore fulfilled this legal requirement but was updated in the IRP to reflect the latest guidance and practice.
- h. The Operational Production and Resource Unit ("OPRU") SOP (Exhibit JK/50 (INQ000373097 INQ000373098; INQ000373100 INQ000373101; INQ000373104 INQ000373109)) was designed to support the safe and timely deployment of WAST front line clinicians alongside military and other non-clinical personnel to increase the number of resources available to respond to patients waiting within the community.

The dissemination of policies/guidance to staff

- 88. As was set out in the September 2020 Plan, following the lessons learned around this issue during the first wave of the pandemic, all available methods of communication were utilised to ensure the greatest number of staff were aware of the policies and guidance surrounding the pandemic. As such, WAST adopted a multi-channel communications strategy during the pandemic to maximise the reach of the information being disseminated. This included the use of the following:
 - a. WAST's internal virtual notice board, "Siren".
 - b. WAST's intranet.
 - c. WAST's social media accounts, particularly the closed staff Facebook group (and later Yammer) and 'WAST Live' sessions.
 - d. Daily and/or weekly bulletins which were emailed to all staff as well as being published on Siren, the intranet and Facebook/Yammer.
 - e. The Joint Royal Colleges Ambulance Liaison Committee ("JRCALC") App, within which a specific Covid-19 section was added and relevant clinical information uploaded.

- 89. WAST's "Have Your Say" survey dated June 2020, which I exhibit at Exhibit JK/51 (INQ000373111), identified that most of WAST's staff were using the Covid bulletins to obtain information and that this was the most effective means of communication.
- 90. In addition, WAST also provided training materials through the intranet. For example, on 16 October 2020, training modules were published covering topics such as PPE requirements (Exhibit JK/52.01 – JK/52.08 (INQ000373112 – INQ000373119)). In addition to written training documents, a number of training videos were produced/made available to assist staff with IPC:
 - a) YouTube Video: Putting on and taking off Red-level PPE for WAST Staff In the initial stages of the pandemic the Covid-19 virus was classified as a high consequence infectious disease (later downgraded to a notifiable disease). This video is a practical demonstration on how to Don and Doff this level of PPE and it was viewed 1,700 times over three years.
 - b) YouTube Video: How to Clean the Versaflo Hood (series S-655 and S-135) During the pandemic not all staff passed fit testing for Face Filtering Protection (FFP3 masks) as such they would have required personal issue of a powered respirator. This video gives practical instructions to staff on the maintenance and

c) YouTube Video: 3M Series Headcovers and Hoods

cleaning of this equipment and was viewed 598 times.

This video is one released by the Manufactures and was used to support the cleaning videos and the donning and doffing videos as a complete package and was viewed over 30,000 times over 7 years.

d) YouTube Video: Ambulance Cleaning Guidance

This video gives a practical demonstration on EMS vehicle cleaning in between patients and pay particular attention to the most touch point areas and suitable cleaning materials and was viewed 574 times.

- 91. Staff were also able to raise questions and queries with their LPT which each had A dedicated phone number and email address.
- 92. As well as a daily bulletin, WAST also developed a suite of bulletin templates to make it easier for staff to readily identify guidance or information being provided to them, according to the relevant directorate, such was the volume of information cascaded.
- 93. The way policies and other information were disseminated did change over the course of the pandemic. For instance, despite the pandemic the decision was made to continue with the planned Office 365 rollout, between April and July 2020. Similarly, a further tech-related development was the provision of personal use iPads which were purchased in March 2020, and rollout to frontline staff commenced in August 2020. Whilst most corporate staff and senior leadership roles had laptops prior to the start of the pandemic, additional laptops were purchased to allow more roles to remote/homework in support of WAST's response to the pandemic. The result of these developments was that colleagues were generally better able to access information, communicate and collaborate.
- 94. Over the course of the pandemic, WAST also moved away from the use of a closed Facebook group as an internal communications tool and means of disseminating policies and information to staff. As was noted in WAST's second wave Structured Debrief Report issued 14 June 2021 (**Exhibit JK/53 (INQ000360402)**), the WAST Facebook group had been *"one of the timeliest communication tools"* but was not *"a secure Trust channel"*. As such, the report recommended consideration of whether Facebook was *"an appropriate internal communications tool"* or if there was a more *"professional"* option. Following this recommendation, WAST started using 'Yammer', a social networking service that is part of the Microsoft 365 suite of products, and which is designed for communication within organisations.
- 95. One very successful aspect of WAST's internal communications strategy was an initiative which was termed "WAST Live". These were virtual Q&A sessions at which members of staff could ask questions of a panel, which would feature members of the EPT. In fact, over the course of the pandemic, WAST Live sessions changed so that the whole EPT would be present, with the intention that as many questions as possible could

be answered within the live format. WAST Live sessions were held regularly and sometimes as often as twice a week and were attended by hundreds of colleagues. The information would also be made available for those unable to attend through recordings of the sessions and subsequent bulletins and updates. Given their success during the pandemic, WAST Live is an initiative that has been retained with sessions being held on an at least monthly basis.

96. In terms of communication within the WAST pandemic structures, Common Recognised Information Pictures ("CRIPs") were universally utilised as the preferred form of communication. These forms were completed by each pandemic cell to provide key information, questions, requests and general communication within the pandemic structures up to and including the EPT. All CRIPs were recorded via a logging system within the Covid Incident Co-ordination Centre ("CICC") so that there was an accurate record of issues raised and the responses to them. Some extracts from a sample of CRIPs, and actions taken in response to these, are described in the table below:

Log No.	Date	Information/Description of Issue	Update on Actions Taken /Required
L1.5	13.03.20	Following completion of training, NEPTS staff to be provided with PPE wallet	16.03.20 - PPE now being rolled out and training provided. Wallet to be supplied once training completed.
L13.1	31.03.20	Donations of kit / PPE	H&S Cell to review offers to risk assess equipment received, with support from IPC Team, to ensure donated items are fit for purpose.
L17.1	16.04.20	Potential stock piling of PPE on ambulances	Reminders to operational staff issued via LPTs. Urgent notice to go out via Daily Bulletin.
L23.1	14.05.20	Micro Guard Suits - Issue of Short Term Limited Stock in Certain Sizes	Confirmed 4,000 units in stock but short term limited supply of some sizes. Issue made more acute following further refinement of PPE guidance. Raised as amber risk on BRAG report 15.05.20 and Tactical Advisor to raise with WG.
LPTN 15.1	04.05.20	Supply of 1863 masks required to commence fit testing	Resolved at TPT – stock now sent to North LPT to distribute
LPTSE 28.1	17.06.20	New risk re: 8833 masks	Shortage of 8833 masks in SE, inly 2-3 days stock left and an additional 100 staff identified as

			unable to wear FFP3 masks. North assessed stock levels and sent quantity of FFP3 masks to SE and C&W regions. Further stock take being undertaken.
H&S 22.1	05/08/20	Staff concern/confusion noted re: plans for Cefn Coed & Cwmbwrla – on pause of progressing?	Discussed and resolved at TPT with communication released following the meeting.

WAST's level of autonomy to respond

- 97. WAST has a high degree of autonomy, and this was retained during the pandemic. This is because of the governance framework and devolved nature of the NHS in Wales, which differs from the other nations. It meant that WAST was able, to a large degree, to make its own decisions about how WAST responded to, monitored, and recovered from the pandemic. There were inevitably some decisions which were not in my, or the organisation's, gift to make, for example in relation to funding, the provision of Military assistance, and to some extent the supply of PPE, but there was no point at which I felt like WAST's freedom of choice was limited by national decision-makers or other organisations.
- A clear example of WAST's autonomy to respond can be seen in the use of Protocol 36. 98. This is discussed in more detail below, but in essence, Protocol 36 was a tool available as part of the Medical Priority Dispatch System ("MPDS") which was designed for use during a pandemic (initially, flu). The purpose of its use during the Covid pandemic was to allow Emergency Medical Dispatchers ("EMDs" or the emergency 999 non-clinical call handlers) to identify, at the point of call intake, those patients that were most likely to be Covid symptomatic and then to triage them within a single dispatch protocol that allowed for the most efficient and effective use of EMS and public safety resources. This meant that WAST could dynamically assess the demand for the EMS and its capacity and escalate or de-escalate through the four levels of Protocol 36 in accordance with WAST's own judgment as to whether or not that was clinically appropriate. This contrasted with other ambulance services in England who I understand had less autonomy and flexibility around their use of Protocol 36 and they had to agree to move as a single entity whilst in Wales it was possible to move into, out of and within levels of the protocol according to the emerging data.

99. On balance, my view is that the devolved nature of healthcare in Wales and the consequent autonomy, was beneficial. WAST could make decisions for itself and could be flexible. I also felt like WAST was closely connected to policymakers and the Welsh Government, which was a significant advantage in delivering WAST's services effectively, safely and within resource constraints.

The response of national and regional decision-makers

- 100. I set out much of my perspective on the response of decision-makers, particularly national decision-makers, in my witness statement for Module 2B, that module being focused on the Welsh Government's core political and administrative decision-making in relation to the pandemic.
- 101. In my witness statement for Module 2B, I explained the frequent contact that WAST and other relevant organisations had with the Welsh Government in the early stages of the pandemic. I provided my view that the Welsh Government did recognise the gravity of what was facing the organisation and enabled WAST to respond. WAST had a frequent dialogue with the Welsh Government and my sense was that any information that the Government had was being freely shared with us. I also shared my understanding that, in the early stages of the pandemic from January to March 2020, the Welsh Government was essentially mirroring what was happening in Westminster, which I consider was a consistent and helpful approach.
- 102. One comment I did make in my witness statement for Module 2B was that advance notice of changes to Welsh Government policy and rules would have been helpful, though I recognised the factors weighing against this. This is something that was picked up in WAST's Structured Debrief Report dated 09 November 2022. It was identified that announcements from the Welsh Government at the end of the week, often on Fridays, resulted in staff working *"late into the Friday and over the weekend to implement actions"*. This was included as part of WAST's feedback to the Government via the LRF debriefing process.
- 103. Other than funding, which is discussed elsewhere in this statement, the two clearest examples of another decision-maker having some direct responsibility for ambulancerelated services are WAST's request for Military assistance and the provision of PPE. As I set out in my witness statement for Module 2B, I made several formal requests to

Dr Andrew Goodall for Military support to assist WAST ambulance teams, so that WAST could increase its capacity. I exhibit all the requests for Military Aid to the Civil Authorities ("MACA") that I made over the course of the pandemic at (**Exhibit JK/54.01** – **JK/54.07** (**INQ000275139** – **INQ000275143**; **INQ000373126**; **INQ000275146**)). These were decisions which, of course, were not in WAST's power to make, but my requests were supported for onward approval. I commented in my Module 2B witness statement that this was an example of positive collaboration between WAST and Welsh Government.

- 104. Following Welsh Government's support for WAST to submit the MACA for the winter period of 2021 into 2022, there was a delay and unfortunately, the Military were not able to provide the full support as requested. The MACA was submitted on 21 September 2021 requesting 251 military drivers from 15 October 2021 to 31 March 2022; however, only 45 Ministry of Defence (MOD) personnel were able to be provided on the 18 October 2021. This number increased to 100 personnel on 25 October 2021 with a further increase to a total of 150 being made on 17 January 2022. The number of MOD personnel available rose to 210 and peaked on 07 February 2022 at 235. A phased reduction in personnel began from 21 March 2022 with the MACA ending on 31 October 2022.
- 105. As to PPE, WAST was somewhat reliant on the stock held centrally by NHS Wales Shared Services Partnership ("NWSSP") as is discussed below.

Giving feedback to national decision-makers

- 106. As set out above and in more detail in my Module 2B witness statement, WAST had frequent and regular contact with the Welsh Government and there were several routes through which WAST could provide feedback. Through these channels, WAST was able to provide the Welsh Government with updates and information regarding capacity, demand, pressures, and other such information as necessary, including what resources we needed. The Welsh Government was responsive to WAST requests and gave help and assistance when we asked.
- 107. WAST feedback was also taken on board in relation to matters with which I thought WAST could provide assistance as opposed to matters where WAST required

assistance. The clearest example of this is with mobile testing. This was something which I suggested to the Welsh Government that WAST could assist with. This feedback was taken on board (**Exhibit JK/55.01 – JK/55.02 (INQ000373128; INQ000275151)**). The Welsh Government subsequently asked WAST to help deliver this service (see the minutes of the EPT meeting held on 03 August 2020) contained within the above exhibit (**Exhibit JK/55.01 – JK/55.02 (INQ000275151)**). Accordingly, from in and around September/October 2020 until March 2023, WAST deployed four Welsh Surge Test Trace Protect ("TTP") Mobile Testing Units ("MTUs"), mobilising a predominantly temporary workforce to provide community-based PCR and, later, some LFT testing.

- 108. Although WAST had no role in any core decisions taken by the Welsh Government over the course of the pandemic, I set out in my Module 2B witness statement that WAST may have had some indirect role to play in informing Welsh Government decisionmaking. The most obvious way for this to have happened would have been through discussions during the Welsh Joint Emergency Services Group ("JESG") meetings, which were attended by the emergency services in Wales, NHS Wales, the Welsh Government and the armed forces and which I chaired. WAST also shared data and other information with the Welsh Government which, again, may have informed decision-making.
- 109. WAST also made regular BRAG ("Black, Red, Amber, Green") status reports to the Welsh Government, as well as to the Local Resilience Forums (discussed under "Collaborative working" below) and other partners. BRAG reports were used throughout the pandemic to inform and regularly update WAST partners on pressures and concerns.
- 110. Whilst there were no Black BRAG reports submitted to Welsh Government, key challenges for WAST resulting in an overall Red BRAG rating included a submission on 07 December 2020 setting out the escalating pressures within WAST. WAST was under increasing pressure in its ability to sustain a community response to patients in a timely manner due to increased demand, flow issues at key hospital sites, and increasing production risks. On 03 December 2020, WAST declared a critical incident because of this pressure. On 14 December 2020, WAST raised a Red BRAG status report relating to increasing staff absences because of Covid-19 being 10% of the EMS workforce,

14% in our Clinical Contact Centres and 12% in 111 environments. Specific requests articulated via the BRAG reports were made of partner agencies because of these pressures, including on 07 December 2020 a request for increased patient flow through hospital systems to increase ambulance availability, plus an ask for SCG partners to consider the release of Fire and Rescue staff from core duties to support WAST. On 14 December 2020, SCG partners were asked to consider joint actions which would protect critical workers through reduced community-based transmissions.

111. The BRAG reports set out these risks across the system whilst highlighting any support required from partner agencies. This system enabled WAST to highlight risks and seek support but was not necessarily relied upon as being the only route for support with WAST approaching agencies such as Fire and Rescue directly. For example, the risk associated with increased staff absence led to the MACA submission to increase resource availability. The flow through hospitals continues to prove challenging for both Health Boards and WAST and the requested consideration through the BRAG reporting did not necessarily materialise.

Collaborative working

- 112. I am asked to address how WAST communicated and collaborated with NHS Trusts within the footprint and ambulance Trusts in adjacent areas. I have also considered WAST's communication and collaboration with the seven Welsh Health Boards.
- 113. As to WAST's work with other NHS Trusts and the Health Boards, in part WAST communicated through the channels discussed in my witness statement for Module 2B. The NHS Wales Chief Executive Management Team and Welsh Government Officials' Meetings were attended by the Chief Executives of the three NHS Trusts in Wales (Velindre NHS Trust and Public Health Wales, in addition to WAST) as well as the Health Boards. The Chief Executives of the Welsh NHS bodies were also members of the NHS Wales Executive Leadership Board, which met monthly, and attended JESG meetings.
- 114. In addition, WAST was also part of the four LRFs in Wales: Dyfed Powys; Gwent; North Wales; and South Wales.

- 115. As was set out in the PIP and subsequent Plans, collaboration was built into the response through utilisation of the Joint Emergency Service Interoperability Programme ("JESIP") principles.
- 116. One specific point of collaboration was that WAST's professional peer groups met regularly with other NHS Wales Health Boards, Trusts, and UK ambulance services to strategise and share learning. Accordingly, WAST collaborated with other NHS organisations to share their messaging with a view to improving reach and contributing to communications consistency and clarity. An example of this was the Public Health Wales vaccination campaign and Welsh Government's Keep Wales Safe campaign.
- 117. As to WAST's collaborative working with adjacent ambulance Trusts, WAST is and was part of the National Ambulance Communications Group ("NACOM") which, particularly in the early stages of the pandemic, was used to share learning and information with other ambulance Trusts about WAST's respective areas. The online collaboration forum 'Basecamp' was also used to share resources with other ambulance Trusts, as well as to test ideas and to discuss the internal and external communications and engagement activity each Trust was engaging in. There was also a quarterly NACOM meeting, in which WAST participated.
- 118. I am asked to comment specifically on whether there were any mutual aid agreements in place with other ambulance Trusts. In short, the answer is 'yes'. However, this arrangement was in place before the pandemic and did not materially change because of it. Guidance for CCC staff on dealing with calls that come from another ambulance Trust's area and on requesting assistance from neighbouring Trusts, can be found in the CCC Resource Deployment SOP, which I exhibit at Exhibit JK/56 (INQ000373130). There was also a pre-existing mutual aid arrangement for spontaneous, protracted and pre-planned incidents. This original Memorandum of Understanding was published by the National Ambulance Resilience Unit (NARU) on behalf of all UK ambulance Trusts in February 2018, and was superseded by a UK NHS Ambulance Services Mutual Aid Memorandum of Understanding ("MOU") in December 2020. This is the current version.
- 119. There were several other collaborations which were pertinent to WAST's ability to respond and support the wider health and care system including an early focus across the UK on hospital bed capacity and the need for additional capacity. This would require

WAST to take patients to different locations than already on its Computer Aided Dispatch ("CAD"). WAST set up a collaborative group with the National Collaborative Commissioning Unit ("NCCU") to gather intelligence on the development of field hospitals around Wales, the number of conveyances to these field hospitals is set out within **Exhibit JK/190 (INQ000410477)**. There was also work to set up a Forecasting & Modelling collaborative group to enhance the intelligence available from WG, PHW and Swansea University for WAST to interpret and consider its response options. WAST's approach to modelling is set out below.

- 120. Whilst ad hoc or spontaneous intelligent conveyance between individual hospital sites to alleviate pressure at the front door are not routinely captured, the Regional Escalation Protocol (**Exhibit JK/176 (INQ000410455)**) agreed by Chief Executives across NHS Wales, outlines the principals and processes for proactive demand management that includes ambulance distribution to hospital Emergency Departments to, as far as possible, minimise patient safety risk as well as the impact of acute increases in activity for both hospitals and WAST. This protocol is utilised on a daily basis by the Operational Delivery Unit and hospital sites across Wales.
- 121. In terms of patient and staff safety, WAST collaborated with other UK ambulance services through the Association of Ambulance Chief Executives ("AACE") Quality Improvement, Governance and Risk Directors ("QIGARD") Infection Prevention and Control (IPC) National Group, to build on the Welsh national IPC guidance to develop internal IPC guidance for staff. WAST also worked with the Small Business Research Institute ("SBRI") to develop innovative and effective cleaning systems for its vehicles, systems which are now routinely deployed in the Make Ready Depots (as discussed below).
- 122. I now turn to deal with some specific aspects of WAST's response to the pandemic.

Modelling

123. WAST did not see any impact modelling from the Welsh Government, Public Health experts or from the University academics that was specific to the ambulance sector. Instead, the modelling which was being produced by these sources regarding the severity of the pandemic, had to be statistically reinterpreted from information on

predicted infection rates in the population, hospitalisation, and deaths, into ambulance incidents and 999 calls. WAST had its own modelling team within the cell structure and used two modelling firms, Operational Research in Health ("ORH") and Optima (known more recently as Omda), to assist.

- 124. This was challenging for WAST because the assumptions underpinning the modelling were changing all the time. WAST attended frequent meetings of the All Wales Medical Directors with the Chief Medical Officer ("CMO") and Public Health Wales ("PHW") represented at all of them. The CMO was picking up information from the UK-wide CMO meetings and was therefore able to supply us with UK-wide data. WAST would then look at what it meant for Wales. This modelling was extremely helpful as it looked at the impact of the pandemic.
- 125. Although carrying out WAST specific modelling did not inhibit us and ultimately this modelling was broadly accurate on review, had it been provided to us by Public Health experts who were assessing the impact across the entirety of the health system, then it is likely to have been even more accurate.
- 126. WAST did, however, already employ demand and capacity modelling tools prior to March 2020 which were designed to assist us in prioritising the allocation of resources in relation to EMS response forecasting and modelling. In particular, ORH and Optima Predict were used.
- 127. WAST had undertaken a comprehensive EMS Demand & Capacity Review in 2019, which meant that ORH had WAST data in its simulation software ('AmbuSim'). WAST already employed an embedded analyst from Optima, and it was routine practice for the Trust to undertake tactical modelling with them.
- 128. I wrote to the NHS Wales Director General on 16 March 2020 and 01 May 2020 (Exhibit JK/57.01 JK/57.02 (INQ000361368 INQ000361369)) setting out WAST's priorities for responding to the pandemic, including "retrofitting" forecasting and modelling, which would need to catch up with early decisions taken by WAST on expanding capacity. Capacity could then be adjusted in response to the modelling and events as they unfolded.

- 129. On 01 April 2020, WAST received the results from the first batch of forecasting and modelling conducted by ORH after the onset of the pandemic (Exhibit JK/58.01 JK/58.03 (INQ000373133; INQ000373135; INQ000373137)). This updated the incident demand profile used in the 2019 EMS Demand and Capacity ("D&C") Review with observed demand data from March 2020 to reflect the changing acuity mix of the patient demand and increase in demand.
- 130. ORH then used the daily number of new infections to further increase the anticipated patient demand to reflect the forecasted waves of the pandemic based on three different scenarios: 75%, 60% and 40% social distancing compliance. The modelling factored in reductions in ambulance unit hours due to absences of WAST's frontline staff through sickness with Covid. It also included modelling of hospital handovers based on the fact that WAST observed reduced handover during the early part of the pandemic but forecasted an increase in the conveyance of patients linked to the pandemic.
- 131. This initial forecasting and modelling undertaken by ORH estimated a 21.7% point fall in Red 8 (immediately life threatening) performance to 53.6% in 'week 15', which was the following week i.e. the week after 01 April 2020. The modelling also estimated very long Amber 1 (serious, but not immediately life threatening) waiting times of 413 minutes (or 6 hours and 53 minutes), the ideal response time for such patients was 18 minutes. The reports from ORH in April 2020 informed decision-making as to what resources would be required to deliver an acceptable level of Amber 1 performance. Covid-19 model results for Wales produced by NHS England and NHS Improvement and received via the Tactical Advisory Cell (TAC) (Exhibit JK/59 (INQ000262304)) were also referenced.
- 132. The ORH modelling identified that WAST would need an extra 1,512 emergency ambulance unit hours per week on top of the 17,296 planned emergency ambulance unit hours per week (**Exhibit JK/60 (INQ000373139)**). The quoted 17,296 is 100% of the plan but the reality for WAST was that a lower unit hours production ("UHP") was being delivered pre-pandemic because of a 'relief gap', i.e., the gap between the FTEs required for the rosters versus the budgeted establishment. For example, in March 2020 our Unit Hours Production ("UHP") was 90%. The modelling data highlighted a need for additional resource and helped support the subsequent MACA requests.

133. As established at the start of the pandemic, a key priority was to focus on the recruitment into the frontline EMS to close the relief gap over a two-year period. In the short term, WAST sought to increase ambulance production through tactical responses such as using overtime and bank staff, as well as offering existing bank staff full-time contracts.

Prioritisation of vehicles based on modelling

- 134. WAST was also able to use modelling data to make decisions about the prioritisation of vehicle allocation to maximise production. Thus, during the first months of the pandemic despite staff absences due to Covid, the production of Emergency Ambulance hours was increased not only through ongoing overtime incentives and the use of armed forces personnel, but also by switching paramedics from Rapid Response Vehicles ("RRV") (solo response vehicles, usually cars, kitted with clinical equipment to provide immediate clinical care to high acuity patients) to Emergency Ambulances ("EA") (double crewed vehicles which are fully equipped to deliver clinical care to a wide range of patients and capable of continuing that care during transportation).
- 135. Over the period of February 2020 to April 2020, WAST produced 105,536 ambulance unit hours, 110,236 ambulance unit hours and 113,947 ambulance unit hours respectively, whilst RRV unit hours reduced from 17,228 to 12,238. This was the result of a prioritisation decision based on the modelled need for an increase in conveying response due to the pandemic. I attach at Exhibit JK/61 (INQ000373140 INQ000373141) the WAST Provider Update EASC 12 May 2020 as an example of how modelling was used to inform prioritisation decisions.

The Forecasting & Modelling Group

136. WAST held many calls regarding forecasting and modelling from the start of the pandemic, before creating a formal Forecasting & Modelling Group which from 21 May 2020 onwards met weekly and continues to do so to this day. Its core role from the outset was to apply the plethora of available forecasts to WAST's planning and operational decision-making and to monitor its impact on key operations such as 999 and 111 calls, EMS response and conveyance as well as EMS/NEPTS surge site ambulance transport. The group created a weekly 'intelligence pack' which brought together the latest forecasts, modelling and actual data on Covid and related metrics.

- 137. The group included managers and analysts from the Operations, Strategy, Planning & Performance Directorate, as well as external representatives who had wider system knowledge on forecasting, modelling, and related activities. Such representatives included the NHS Wales Delivery Unit represented by Dr Jenny Morgan, Operational Research and Modelling Development Manager, and the NCCU represented by Ross Whitehead, Deputy Ambulance Services Commissioner, and his team. The approach was to allow open access to data to enable a diversity of perspectives from within and outside of WAST.
- 138. The data received by the group included modelling from the Welsh Government's National Modelling Forum, such as a RWC scenario model for winter 2020/2021, (Exhibit JK/62.01 JK/62.04 (INQ000399842; INQ000373143; INQ000373145 INQ000373147)) produced by Swansea University. Optima (using Optima Predict) were able to use the data within that RWC scenario to develop a range of potential scenarios for December 2020, December being the month during which demand is normally at its highest and, in this case, the month during which a new wave of the pandemic was predicted. Optima modelled three December 2020 scenarios "Worst Case high Covid19", "Most Likely high Covid19" and "low Covid19".
- 139. Optima used the modelling assumptions within each scenario to simulate what would happen to WAST utilisation levels and the Red and Amber response times. Optima also considered several scenarios in which the effects of this demand were mitigated by either increasing production (capacity) and/or reducing activity (demand) through escalation of the DMP levels.
- 140. WAST produced a detailed tactical seasonal plan template based on the RWC scenario identified in this modelling, which encompassed three core elements namely, ensuring production levels (UHP) were maximised, taking action to reduce demand, and enabling and supporting operational delivery. Throughout, the group remained flexible considering the latest data. The report of the WAST Trust Board dated 01 October 2020, which detailed seasonal planning for winter 2020/2021 with a particular focus on modelling and forecasting can be found at **Exhibit JK/63 (INQ000373148).**

Prioritisation and Management of Patients

- 141. In terms of how decisions on the prioritisation of patients were made, changes such as implementing and escalating Protocol 36 were ultimately approved by the EPT based on recommendations from the CAC and TPT/SPT. Decisions as to, for instance, the priority to be assigned to each Protocol 36 code, or determinant, were taken by the Clinical Prioritisation and Assessment Software Group ("CPAS"), which reported to the CAC. CPAS further made recommendations as to the dispatch cross reference (DCR) table (**Exhibit JK/64 (INQ000373149)**), which translated any MPDS code to a priority response and type of response. CPAS decisions and recommendations were generally aligned to priorities throughout the rest of the UK and followed the exact same process that WAST used for MPDS protocols in general.
- 142. There were essentially three stages in the prioritisation of patients: firstly, the assessment undertaken by the call handler when the call was received, secondly, where appropriate a remote clinical assessment and triage undertaken by clinical support staff, and thirdly the clinical assessment carried out on the arrival by the individual(s) attending the patient.

Prioritisation at call stage

143. Prioritisation at the first stage was done by way of tools within MPDS, i.e., Emerging Infection Disease Surveillance ("EIDS") and Protocol 36.

EMS (999 Call Receipt and Triage)

Medical Priority Dispatch System ("MPDS")

144. When a person calls 999, calls will be connected to British Telecom ("BT") via the 999 network and based on the service requested and/or information provided the emergency operator will select an emergency provider. For medical emergencies, this would ordinarily be the ambulance service however, where multiple emergency services are required, the operator will select the most appropriate agency and agencies will then cascade this information to other relevant emergency services or authorities, including but not limited to ambulance services. Once connected, the emergency operator will monitor the call to ensure a connection has been established and to provide further assistance to the emergency authority when required, or to provide location information if appropriate.

- 145. Welsh Ambulance Services NHS Trust is the national provider for ambulance services in Wales. However, where calls are placed near a bordering authority, the call may be placed with the neighbouring service such as North West Ambulance Service, West Midlands Ambulance Service or South West Ambulance service. This occurs mostly when the call is made using a mobile telephone where the connected cell tower is in the neighbouring service's geographical jurisdiction. In this instance the call will be handled by the receiving provider and then cascaded to the responding service through digital and audio platforms.
- 146. On connection of a 999 call from BT emergency operators to WAST the attempt will be to link the call to the nearest contact centre based on the geographical location of the patient. However, WAST operates a virtual network for call handling so where an EMD is not available at the connected centre, the call will automatically be routed to the next available 999 call handler in any WAST 999 contact centre. Where no 999 call handlers are available across WAST call handling supervisors, managers and 999 call handlers are notified of waiting calls via wall board information displays and capacity management plans are invoked to answer the call as quickly as possible. Where a call is unable to be answered within 5 minutes, BT will then invoke the National Mutual Aid arrangements and link with the appropriate UK ambulance service providing 999 cover. This system has subsequently been replaced by the Intelligent Routing Platform in November 2022.
- 147. In WAST's case, if the call is answered by WAST, then the caller will be asked a series of entirely scripted questions by the EMD, as dictated by the software. Across the UK, ambulance services use one of two triage systems: MPDS or NHS Pathways. MPDS is supplied and licensed via the International Academy of Emergency Dispatcher ("IAED") and is utilised in 59 countries globally across more than 4000 emergency dispatch centres. The software used by WAST is MPDS which enables non-clinical call handlers to assess and code 999 calls. Each of these codes has been assigned a responding priority by CPAS, as already explained. MPDS is a scripted question and answer system broken down into four sections: Case Entry, Key Questions, Post Dispatch Instructions and Pre-Arrival Instructions. During Case Entry the EMD will obtain key information and patient demographics required to provide an appropriate response which includes the location of the emergency, a contact telephone number, key patient information including the age, gender, level of consciousness and breathing status of the patient,

how many patients require assistance and the reason for the call. Based on this information EMDs must select a Chief Complaint protocol to direct prioritisation. As part of business-as-usual operations WAST utilise 33 protocols. Each Chief Complaint Protocol will have a series of condition-specific questions to be asked and, based on the responses recorded from a pre-determined list, a determinant code is generated. This code is then cross-referenced with the organisation's Clinical Response Model to identify the priority of response, the type of response (face to face or remote clinical triage) and the ideal resource required (CSD, 111, Advanced Paramedic, Emergency Ambulance etc).

- 148. The MPDS code is then inputted into a DCR table. Ambulance Services operated through NHS England commissioning undertake a joint approach to DCR table review and prioritisation. Devolved administrations can maintain their own DCR table for prioritisation and as such WAST operates an individual table that is unique. To benchmark and share best practice, WAST clinical leads consult with NHS England around DCR recommendations and consider them for application within Wales; however, it should be noted that there are differences in application between the two systems. The DCR table translates the code into a priority from Green 3 (lowest priority), Green 2, Green 1, Amber 3, Amber 2, Amber 1, and Red (highest priority) and will set out the type of response required by each priority, (i.e., whether a face-to-face or a specialist response is required). I exhibit at Exhibit JK/65.01 JK/65.11 (INQ000373150 INQ000373160) the DCR tables for reference. The initial priority that we give by reference to the DCR table is to try to screen out people who need an immediate or high priority response.
- 149. MPDS also includes an Emerging Infectious Disease Screening tool (EIDs) and additional protocols including Protocol 36 designed to support prioritisation of patients during Pandemic Flu events. These are not operated as business-as-usual but are available for immediate operation through local configuration within WAST.

Emerging Infection Disease Surveillance ("EIDS")

150. Following advice promulgated by the IAED, which is responsible for governing how the EIDS (the product) is used, during the early response to the pandemic, WAST took the

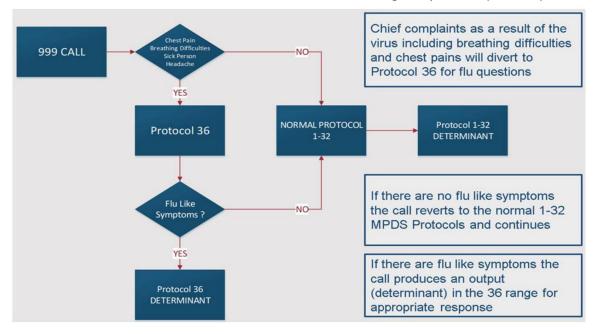
decision to implement EIDS quickly on 24 January 2020 (See paragraph 147 for details of IAED).

- 151. EIDS is a tool which enables Ambulance Trusts to implement an enhanced medical dispatch caller screening protocol for a specific disease outbreak for surveillance purposes only. Crucially, this does not require a change to response levels or alternate dispositions that may be necessary at a later stage when the disease outbreak becomes severe enough to create a major strain on local health care resources.
- 152. The purpose of using EIDS is to gather intelligence on disease prevalence in a way that does not alter ambulance response levels. It provides a mechanism enabling ambulance services to glean additional information from a caller to see whether the disease is potentially present. It is therefore a supplementary mechanism, in addition to standard call-handling practice, which can help ambulance services to understand what is occurring with a particular disease.
- 153. The Academy released information regarding EIDS on 21 January 2020. It took WAST about 3-4 days to receive, absorb, and deploy that information, before we launched it 3 days later. This was timely because the first suspected Covid case in Wales occurred on 30 January 2020.
- 154. EIDS was discontinued when Protocol 36 was implemented, before being re-introduced in June 2021 and March 2022 (**Exhibit JK/66 (INQ000373161)**). By June 2021, it featured enhanced questioning to enquire as to whether the caller had received a Covid vaccination and whether they had received a positive Covid diagnosis in the previous 14 days.

Protocol 36

155. Protocol 36 is an MPDS protocol for specific use in pandemic situations and was used by WAST to identify potential Covid cases. It was modified by the IAED for specific application to the Covid19 pandemic. It was designed for use when it became necessary for Ambulance Trusts to respond differently to an overwhelming number of symptomatic callers.

- 156. The decision to implement Protocol 36 was taken by WAST. WAST did, however, take on board the recommendations from the IAED as well as other UK Ambulance Trusts. NHS England implemented Protocol 36 *en masse* rather than on an individual basis.
- 157. The major benefit of Protocol 36 was that it gave WAST the ability to deal with calls at different levels by enabling the organisation to better prioritise those calling with 'flu-like' symptoms. Callers with such symptoms typically presented with complaints such as breathing difficulties, chest pains, headaches and feeling generally 'ill'. In the case of Covid, these complaints generally stemmed from the virus itself rather than underlying issues. In fact, most of those experiencing symptoms of Covid were able to manage their own care at home and did not require an ambulance. However, implementation of Protocol 36 also enabled WAST to screen more serious conditions such as heart attack or respiratory compromise where similar symptoms to the above were reported. Protocol 36 therefore assisted WAST greatly in terms of indicating when an ambulance was required to attend and where symptoms were more likely a result of Covid and could be managed on a non-urgent basis.
- 158. **Exhibit JK/67 (INQ000373162)** is a PowerPoint presentation, "MPDS Throughout the Pandemic in Wales", and includes a flowchart demonstrating this process (slide 25).



159. There were four levels of escalation within Protocol 36: Level 0 (surveillance only), Level 1 (low triage), Level 2 (moderate triage), Level 3 (high triage). At Levels 0 and 1, WAST's

response was similar to what was already in place before the adoption of Protocol 36. At Levels 2 and 3, however, some calls that would otherwise have triggered an ambulance conveyance were instead dealt with via telephone 'hear and treat' services and some patients were marked as 'No Send', i.e., patients are redirected to their General Practitioner ("GP"), 111 Service or to make their own way to hospital. Prioritisation is fundamentally about how urgently the caller needs to get to the next stage of assessment. 'No Send' is essentially the last option as it informs the caller that 999 is unable to assist them with appropriate signposting given instead. This is a last resort option; however, it becomes necessary when the service is under high pressure. Protocol 36 incorporated the use of 'No Send' in a structured way, with "No Send" outcomes incorporated at Level 2 and Level 3 (of note Level 3 was never reached). For the pandemic period, there were 1,207 incidents which received a No Send outcome and therefore did not receive an ambulance resource.

- 160. Level 0 required EMDs to utilise the Protocol 36 question set for all calls which would previously have been prioritised through Protocol 6 (breathing problems), Protocol 10 (chest pain) and Protocol 26 (sick person) (Exhibit JK/68 (INQ000373163) and see Exhibit JK/66 (INQ000373161)). The priority responses associated with Protocol 36 were then realigned to the host code to ensure that patients did not suffer detriment because of implementing the flu questioning. As the level was escalated, 'hear and treat' was used more, though the codes remained the same.
- 161. The DCR tables show which priority codes were changed when Protocol 36 was activated. For instance, code 36A01, which relates to "Chest pain/discomfort" in those under 35 with a single flu symptom, would trigger a 'No Send' response at Protocol 36 Level 3. Similarly, code 36A02, for "Chest pain/discomfort" in those under 35 with multiple flu symptoms would trigger a 'No Send' response at Levels 2 and 3. Code 36A03, for "Flu symptoms only (cough fever chills sweats sore throat vomiting diarrhoea unusual total body aches headache)" would trigger a 'No Send' response at Levels 1, 2 and 3.
- 162. At WAST, the Protocol 36 level was decided by the EPT with recommendations from the Clinical Cell and operations colleagues. Decisions taken to escalate to a higher level

were driven to a large extent by prevalence data showing delays with, in particular, the Amber category.

163. On 02 April 2020, WAST implemented Protocol 36 from Level 0 and discontinued EIDS, following a recommendation to the EPT on 23 March 2020 in anticipation of an increase in 999 calls from April 2020. The change was announced via a "COVID-19 UPDATE" from the Operations Department on 01 April 2020 (Exhibit JK/71 (INQ000373166)). Further, the Clinical Contact Centres' Standard Operating Procedure ("CCC SOP") version 9.1 (Exhibit JK/72 (INQ000373167)), was updated on 09 April 2020 to cover the replacement of EIDS with the appropriate guidance for the use of Protocol 36, and on 09 April 2020 to cover 'No Send' outcomes. It provided that where a 'No Send' outcome was produced by Protocol 36, callers were to be provided with the following script:

"We are currently experiencing a large number of life-threatening emergencies due to the pandemic and an ambulance is not able to be sent to you.

Our advice is to ring your GP or go to 111 online.

You could also make your own way to a minor injury unit or an emergency department at the hospital. If you choose to do this, please follow any directions displayed on your arrival."

- 164. Furthermore, the CCC SOP provided guidance on how to deal with "Cross Border Incidents" under Protocol 36.
- 165. The Protocol 36 level was constantly monitored throughout the pandemic, for instance reaching Level 2 on 09 December 2020 (until 03 February 2021) (Exhibit JK/73.01 JK/73.13 (INQ000373168 INQ000373180)). Clinical audits were conducted throughout. A timeline showing the changes made to the Protocol 36 level between April 2020 and June 2021 (i.e., during the first and second waves) as well as when WAST returned to EIDS can be seen in (Exhibit JK/74 (INQ000373181)). The relevant slide is reproduced here:

EIDS & P36 Timeline NAVIGATOR CIAED 30 Jan 2020 1st Suspected Covid case 24 Jan 2020 21 Jun 2021 **EIDS Switched** P36 Off On Pandemic Response EIDS On Wave 1 Wave 2 Sep21 Mar20 Sep20 Jun21 Jan20 2 Apr 2020 9 Apr 2020 20 Apr 2020 15 Sep 2020 9 Dec 2020 3 Feb 2021 19 Apr 2021 P36 Level 0 P36 Level 1 P36 Level 0 P36 Level 1 P36 Level 2 P36 Level 1 P36 Level 0

- 166. Protocol 36 was reintroduced at Level 0 on 13 September 2021, then escalated to Level 1 on 21 September 2021 and Level 2 on 07 January 2022. It was de-escalated to Level 1 on 27 January 2022 and Level 0 on 24 February 2022, before being replaced by EIDS again on 10 March 2022. EIDS was finally removed altogether on 01 July 2022. The relevant documents are exhibited at Exhibit JK/75.01 – JK/75.15 (INQ000373182 – INQ000373195; INQ000373180).
- 167. The factors taken into account when deciding to escalate the Protocol 36 level included: the level of escalation in England, the current WAST REAP level, the current WAST DMP levels across the centres, a judgement call as to whether escalation would mitigate the demand risk and/or increase overall patient safety. Whilst in England the Ambulance Trusts moved as a group in relation to the level at which Protocol 36 was set, WAST was separate. WAST's view was that escalation would be required not only if ambulance services were pressured, but also when the health service as a whole was under pressure. If the health service was not under pressure, then it didn't seem as appropriate to escalate the Protocol 36 level. If, however, the health service was saturated and trying to determine who was sick enough to go to hospital in the circumstances, then that was something which was going to drive the Protocol 36 level.

- 168. By 08 April 2020, it was apparent that although EMD demand remained within normal levels, Protocol 36 deployment showed that the prevalence of potential Covid cases had increased, suggesting more widespread prevalence of the virus. At this point, the volumes being triaged through Protocol 36 were therefore increasing (roughly 25% 33%). Roster production was strained on the one hand, whilst on the other hand there were low transportation rates among some of the Protocol 36 determinants. This created a potential imbalance of risk. It was therefore considered that an escalation to Protocol 36 Level 1 would be of benefit. This was approved and implemented by the EPT on 09 April 2020.
- 169. The minutes of the meetings of the EPT at which decisions regarding the escalation and de-escalation of the Protocol 36 level were recommended and approved are exhibited at Exhibit JK/75.01 – JK/75.15 (INQ000373182 – INQ000373195; INQ000373180).
- 170. In the weeks after Protocol 36 was first activated by WAST in April 2020, significant numbers of calls were redirected from other Protocols such as Protocol 6, 10 and 26 to Protocol 36 (purple). It is likely that this spike was representative of Covid that was occurring at that time. A performance data pack in SPT/TPT was produced weekly and its aim was to review capacity, demand, and performance across the WAST Operations department and then undertake a review of escalation levels (REAP) based on indicators from the report. The Protocol 36 demand profile can be evidenced in slide 13 of the Protocol 36 'Data Pack' of 20 April 2020 (**Exhibit JK/76 (INQ000373197)**).
- 171. Further, the Monthly Integrated Quality and Performance Reports ("MIQPR") of April 2020 and June 2020 (Exhibit JK/77.01 JK/77.02 (INQ000373198 INQ000373199)) noted that 'Red demand' was falling. The June report, at paragraph 18, attributed this largely to:

"a change in application of the MPDS and Protocol 36 which has Red coding's [sic] associated with ineffective breathing and cardiac chest pain."

172. We made the decision to remove Protocol 36 in June 2021, as it was observed that infection rates were reducing even though the volume of calls going through Protocol 36 level was constant. There was therefore a variation between community activity and who was going into hospital, such that the clinical advice was that there was a risk that

Protocol 36 was masking other conditions in callers, such as asthma (particularly given the season). That is why we removed Protocol 36 at that point and reinstated EIDS.

Other screening questions used in addition to Protocol 36

173. We also asked screening questions about the patient's family or household. This was not for determining the appropriate response to the patient's complaint and was therefore outside of the MPDS/Protocol 36 framework. However, it was useful information for us in that it helped us to define the necessary safety considerations for WAST personnel once they arrived with the patient.

Remote clinical assessment

- 174. Like many other UK services, WAST uses paramedics and nurses to undertake remote telephone assessments of patients calling the 999 emergency service line. Using their clinical knowledge, experience, and computer decision support software, these clinicians assess patients from a range of clinical acuities to identify and support those patients who can be cared for with remote treatment advice and, if required, onward referral to the most appropriate service. This continued throughout the Pandemic period.
- 175. WAST also launched a homeworking solution for its clinicians using remote digital systems. This increased surge capacity in response to spikes in call demand as well as freeing up space in Contact Centres for physical distancing and other staff to work.

Management of patients at the ambulance arrival stage

- 176. The use of Protocol 36 did not fundamentally change the clinical management of patients once the crew arrived with the patient.
- 177. A difficulty for WAST crews on arrival was that we could not tell who had Covid and who did not. However, WAST was never in the position of having to refuse to convey non-Covid patients to hospital. Those who presented with a condition for which they would previously have been transported, such as a heart attack or stroke, were still conveyed.

- 178. Likewise, we did not reach the stage of having to refuse to convey Covid patients to hospital. If it was considered that a particular patient could be managed at home with appropriate advice, then staff of all grades and professional roles were encouraged to contact a healthcare professional for support with the decision making. This was through contact with primary care, out of hours services as well as the Trust's Clinical Support Desk, the health board clinical lead and the senior clinical on call line. Although it should be noted that this is encouraged in business as normal practice also.
- 179. In May 2020 a system called Consultant Connect was introduced. Consultant Connect is a telemedicine application which allows clinician to clinician specialist clinical advice or referral. Consultant Connect is not the only way clinicians can make a referral. In the event of a call being made and subsequently answered this does not mean the referral was successful and should not be used as an indication that the patient did not go to hospital.

WAST CC Usage from 01 March 2020 to 28 June 2022

Total Calls Made: **27,203** Total Calls Answered: **24,211**

The lines that have been included are listed below:

- Acute Medicine AGPU
- Acute Medicine OOH
- Acute Medicine SAU
- Acute Medicine WAST
- APP CCC Desk
- Clinical Advice Clinical Support Desk CCC
- Clinical Advice WAST Senior Clinical on Call
- Community Acute Clinical Team
- Community ART Team
- District Nursing
- Emergency Medicine CAV 24/7 Bookings WAST
- GP Advice Out of Hours
- @Home Service WAST

- Maternity
- Mental Health
- Mental Health Admiral Nurse (dementia support)
- Mental Health Crisis Team
- Mental Health Street Triage Team
- Midwife Advice
- Minor Injuries Unit
- Obstetric & Gynaecological Referrals
- Paediatrics
- Palliative Care
- Referrals AECU
- Referrals C.O.P.D Pathway
- Referrals Early Pregnancy Unit
- Referrals E.N.T
- Referrals Falls/ Resolved Hypoglycaemia/ Epileptic seizures
- Referrals Flow Centre
- Referrals Medical Assessment Unit
- Referrals Minor Injuries Unit
- Referrals Poisons Unit
- Safeguarding Adults
- Safeguarding Children
- SDEC
- SICAT (Single Integrated Clinical Assessment and Triage)
- Stay Well@home (Social Care) WAST
- UPCC
- 180. The app was implemented across health boards and although this was completed by June 2020, additional advice/referral lines continued to be updated throughout the pandemic. However, if a patient was severely ill, they were still taken into hospital for further assessment and management.
- 181. It became apparent that patients who initially appeared quite well could in fact be running low O2 saturation levels, such that once they exerted themselves in some way, they became quite unwell. O2 saturation monitors were therefore useful for determining

people who may have had some Chronic Obstructive Pulmonary Disease ("COPD") anyway and who clinically appeared well but were at dangerous levels. WAST would not leave patients in this category at home but would take them to hospital for further assessment.

182. There was no mass deployment of O2 saturation monitors in Wales. Rather, they were used locally for example by some Health Boards when patients were discharged from respiratory units or when they saw and assessed patients. Such patients would be supplied with O2 saturation monitors and advised to contact the respiratory unit directly if they fell below a certain level. From WAST's perspective, whilst there were not national guidelines to follow on this issue, WAST crews would test patients and reach a decision. However, WAST did not reach the stage whereby patients of a certain age would not be conveyed if their O2 saturation level was below a certain level. WAST always maintained the default position whereby crews would look to either convey the patient or seek medical advice from a local hospital.

Guidance provided to ambulance staff about the care/treatment of patients.

- 183. This section of the witness statement addresses the clinical guidance that was provided to staff to assist with decision-making in respect of the treatment of both Covid and non-Covid patients.
- 184. Initially, all guidance was contained in a single document: "WAST Guidance for incidents involving Covid-19" (Exhibit JK/78 (INQ000373086)). The first version was released on 20 January 2020, and it was updated on 27 March 2020. Its' aim was to provide guidance to WAST staff responding to and managing incidents involving patients with suspected or confirmed Covid infection. It covered a range of clinical and non-clinical issues:
 - a. Joint Emergency Service Interoperability Principles ("JESIP")
 - b. Initial risk assessment at point of call
 - c. Face to face assessment
 - d. Preparing for transfer from a non-hospital location
 - e. Confirmed Covid cases
 - f. Vehicle Decontamination
 - g. Linen, waste, and uniform
 - h. Treatment of the deceased

- i. Communications and media
- j. Self-isolation
- k. Plan validation
- I. Training
- 185. It soon became evident that it would be difficult to maintain the guidance cohesively, without it becoming cumbersome when it was contained in a single document. We therefore designed and introduced a 'hierarchy of documents', organised by topic/theme, to enable users to find relevant advice more quickly, and to improve WAST's corporate handling of the information. This suite of documents was initially produced on 04 May 2020 and updated on 16 December 2021 (Exhibit JK/79.01 JK/79.02 (INQ000373201 INQ000373202)).
- 186. This overarching document exhibited above, has sub-documents by topic, as per the illustration below.



Clinical Guidance

- 187. As shown within the flow-chart above, a document was created which contained the relevant clinical guidance for WAST staff. Its first iteration was produced on 13 May 2020 (Exhibit JK/80 INQ000373203; INQ000227026; INQ000373221; INQ000226961; INQ000373217 INQ000373220; INQ000227027; INQ000373212; INQ000373215; INQ000373213; INQ000227039; INQ000472151; INQ000411544 INQ000411545; INQ000373205; INQ000411547; INQ000373207; INQ000373206). Minor alterations were made on 20 May 2020 and 27 August 2020, before a final version was released in September 2020 (Exhibit JK/81 (INQ000373225)).
- 188. The Clinical Guidance addressed a range of scenarios which were relevant to the decisions taken by staff in responding to Covid and non-Covid patients, namely:

- a. Situations in which responders, commanders, and organisational or departmental leads were making decisions together
- b. Managing patients with acute respiratory illness
- c. Conveyance to hospital
- d. Aerosol Generating Procedures
- e. Cardiac arrests
- f. Using Consultant Connect
- g. Just In Case medication
- h. Nebulisation
- i. Atypical Covid-19 presentations
- j. Use of Patient Clinical Records
- 189. In particular, the Clinical Guidance included a decision support tool which was created using the Welsh Government's "Primary and Community Care Covid Framework" as a baseline. The decision support tool was designed to assist responders in reaching decisions regarding conveyance to hospital. To be approved, the decision support tool required access to specialists within the Health Board. It was not possible for WAST to approve the use of the tool in clinical practice without this access. It is not clear why the access to specialists was delayed but in May 2020 access to specific advice and pathways started to be developed using Consultant Connect which was then progressed as described in paragraph 178 to facilitate access into a number of pathways and specialists as they were established.
- 190. First and foremost, conveyance decisions were to be reached based on clinical need, patient wishes, and the agreed best interests for the patient. WAST staff were advised to manage Covid patients within their current clinical practice guidelines, clinical advice, and their scope of practice and to use existing care pathways for non-Covid patients as outlined according to clinical practice. There is no evidence that not introducing the decision support tool caused any issues or concerns for our staff or affected patient safety in anyway. Any clinical concerns that our staff may have had could have been escalated through to a senior clinician who were on call 24/7.
- 191. The "Incident Response" guidance shown within the hierarchy of documents above, first released on 05 May 2020 (**Exhibit JK/82 (INQ000373087)**), provided guidance for

staff on responding to patients in the community. This generally covered topics which were not strictly related to conveyance decisions (i.e. PPE, AGP, and communications). For completeness, however, on a clinical level, this document advised staff to:

- a. Treat patients as confirmed Covid cases if they met what was then, as of 10 April 2020, the appropriate case definition (acute respiratory distress syndrome or high temperature (37.8 degrees centigrade or higher), and at least one of the following symptoms which had to be of acute onset: persistent cough (with or without sputum), hoarseness, nasal discharge or congestion, shortness of breath, sore throat, wheezing or sneezing).
- b. Consider differential diagnoses and the patient's primary presenting condition if no risk factors could be identified.
- c. Convey patients to hospital only if their medical condition required it (and that staff should follow local processes regarding community and temporary hospitals in this respect).

Staff Action Cards

192. Staff were further provided with Action Cards, which were published to the SharePoint platform and referenced in daily bulletins for staff. These were documents which generally contained flow charts and/or diagrams designed to make it easier for staff to understand changes to a particular protocol on a given issue, for example how and when to apply items of PPE. Most of these addressed issues that were not concerned with conveyance decisions or the clinical management of patients.

Clinical Notices, Official Notices, Covid Updates

- 193. Guidance on the treatment of patients was also disseminated by the Medical Directorate via "Clinical Notices", "Official Notices" and "Covid-19 Updates" as and when required according to particular developments. For example:
 - a. On 09 April 2020, EMS staff were advised as to the national shortage of 1:10,000 pre-filled syringes ("PFS") and that 10ml dosages were to be used temporarily until PFS stocks returned (Exhibit JK/83 (INQ000373227)).

- b. On 16 April 2020, the Medical Directorate shared an "FAQ document". As well as advising on matters such as PPE and communication, it contained a clinical section which addressed two particular issues namely, the use of ibuprofen in Covid patients (NICE had issued guidance on this) and when to convey a patient to hospital notwithstanding the general advice for patients with mild Covid symptoms to self-isolate at home (staff were advised to seek advice from a CCC, which allowed senior clinicians to be contacted by telephone for assistance in making such decisions) (Exhibit JK/84 (INQ000373228)).
- c. On 30 April 2020, Clinical Guidance was issued on: "Atypical Presentations of COVID-19 Disease". This detailed for WAST staff how to identify and treat Covid in circumstances where the patient did not have respiratory symptoms, where the patient was a child or younger adult and where the patient was seriously ill. "Key take home points" were listed at the end and staff were reminded of further resources and the availability of the 24/7 clinical on-call structure if necessary (Exhibit JK/85 (INQ000373229)).
- d. On 05 June 2020, advice in the form of a position statement (Clinical Notice Ref. 024 dated 07 April 2020) (Exhibit JK/191 (INQ000373356)) was shared on adaptations to resuscitation practice in the Covid context, including how staff could best protect themselves and treat patients. This guidance addressed airway management, the taping of joints, and the removal of airway adjuncts where the return of spontaneous circulation ("ROSC") had been achieved or the final movement of the patient had taken place (Exhibit JK/86 (INQ000373230)) and was undertaken donning level 3 PPE. Prior to the implementation of the revised guidance for the use of Personal Protective Equipment on 05 June 2020, WAST complied with the revised guidance for the use of Personal Protective Equipment 02 April 2020 issued by Public Health England and supported by the Chief Medical Officers for the 4 Nations (COVID-19 PPE Position statement ref 034).
- e. At this point in the Pandemic the Covid-19 virus was downgraded from a High Consequence Disease ("HCID") to a Notifiable Disease ("ND"), and the level of

PPE changed. National guidance was issued, and we aligned our internal guidance and terminology on that basis. Staff were no longer required to don and doff red levels of PPE and only required enhanced transmission based precaution when treatment involved aerosol generating procedures (this was defined as level 3 PPE in the organisation). The difference between red level PPE and level 3 PPE was the requirement to wear boot covers. Staff were also advised that should they wish to upgrade their PPE based on their own dynamic risk assessment this was acceptable practice.

The Clinically Vulnerable

194. WAST disseminated guidance to staff concerning clinically vulnerable patients in a range of scenarios. A clinical notice released on 05 January 2021 provided guidance on when it was safe to manage suspected COVID-19 patients in the community (Exhibit JK/87 (INQ000373231)). This took into account different patient groups and their clinical vulnerability which included age, long term conditions, ethnicity, cancer treatment, shielding categories plus several other categories. This was then stratified into low, moderate, and high risk according to those vulnerabilities. The majority of WAST's PPE requirements were universal for all staff and volunteers, for the protection of all patients and WAST people. In specific circumstances, WAST did undertake action to protect clinically vulnerable patients, particularly in NEPTS where there were opportunities to limit social contacts for clinically vulnerable patients including oncology and renal patients. Specific questions were asked at booking to determine a patient's potential covid exposure, and consideration given to spacing of patients within the vehicle. Additionally, for WAST staff at increased risk from exposure to Covid, opportunities for redeployment, and working from home were provided, and for vulnerable volunteers a stand-down from responding.

Frail Patients

195. On 08 April 2020, WAST implemented the "Clinical Frailty Scale" for use by staff as part of patient assessments. A clinical notice explaining this change, accompanied by a "Rapid Clinical Instruction Bulletin" which detailed how to use the frailty scale, was issued by the Medical Directorate to staff on that date (Exhibit JK/88 (INQ000373232)). 196. The purpose of the frailty scale was to assist staff in determining the appropriate location for patients. Where appropriate, for patients aged 65 and over without stable long-term disabilities, staff were required to grade the patient's frailty on a scale from 1-9, and to inform the receiving clinician on handover of that score, together with the accompanying descriptor for that figure (i.e. 1: very fit; 9: severely frail) and the patient's age. Staff were advised that physical appearance is not the only indicator of frailty, and that frailty should be suspected in certain circumstances, for example, if the patient has fallen or if they are immobile, incontinent, delirious, socially isolated or susceptible to the side effects of medication.

Black, Asian, and Minority Ethnic patients

197. Further, frontline staff and volunteers were notified that certain groups, such as those of a Black, Asian, and minority ethnic background were more vulnerable to Covid and were impacted more than those of other ethnic backgrounds. Staff and volunteers were therefore advised to take extra care in assessing those patients due to the risk of rapid deterioration. This had become apparent through several reports during the pandemic. For example, the First Minister's BAME Covid-19 Advisory Group Report of The Socioeconomic Sub-Group Chair Professor Emmanuel Ogbonna June 2020 (Exhibit JK/177 (INQ000227599)); and the response document 'COVID-19 (Black, Asian and Minority Ethnic Socioeconomic Sub Group Report: Welsh Government Response Our response to the Sub Group's report and recommendations' (Exhibit JK/178 (INQ000300238)); and others (Exhibit JK/179.01 – JK/179.04 (INQ000228037; INQ000353878; INQ000106482; INQ000215514)).

End of Life Patients

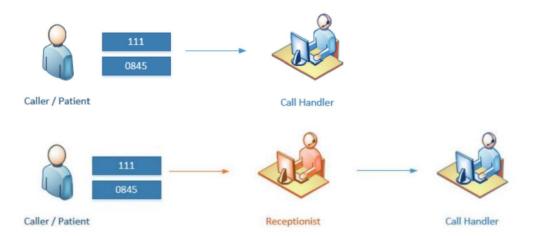
198. On 20 April 2020, WAST via its Medical Directorate issued a Clinical Notice updating staff on the approach to take in scenarios where it appeared that the deterioration in a patient attended to by WAST was not capable of being reversed: "Community Palliative and EoLC during Covid-19 Pandemic" (Exhibit JK/89 (INQ000373233)). The WAST produced and the NASMeD produced guidance documents were released in the same week. The WAST End of Life Care Lead produced the WAST guidance and, as part of the UK group of Ambulance end of life care leads (which is a sub-group of NASMeD) contributed to the production of the NASMeD guidance.

- 199. This document advised WAST staff that patients who were older and/or frail and/or with co-morbidities or serious illness were most at risk of fitting the category of patients who would not benefit from escalation of treatment and transfer to an Intensive Care Unit. It was emphasised that a decision on whether to pursue palliative care instead of conveying the patient to hospital should not be taken in isolation, and that shared decision making should be preferred. Staff were therefore informed that they could seek advice from primary care doctors (GPs and Out of Hours GPs) and palliative medicine doctors, and that WAST had a senior clinical advice line in place to assist with shared decision-making.
- 200. In circumstances where palliative care was pursued, the document set out that "symptom control guidance" (**Exhibit JK/90 (INQ000373206)**) could be accessed via the JRCALC Plus App as well as via WAST's Clinical Notice section within the Intranet. This symptom control guidance was designed to assist ambulance staff in supporting patients where a palliative care approach was appropriate.
- 201. Further, provision was put in place for "Just in Case" ("JIC") medication for patients who became extremely symptomatic very quickly. Staff were advised that such medication was capable of relieving symptoms only. Use of such medicine was detailed further in the document. To this end, WAST distributed the following advisory and administrative documents to staff (Exhibit JK/91.01 JK/91.03 (INQ000373235; INQ000373205; INQ000373207) for use in 'Just in Case' situations:
 - a. An SOP for the administration of 'Just in Case' medications
 - b. WAST Verbal Order for 'Just in Case' medications
 - c. WAST 'Just in Case' medications Record of Use

The 111 Service

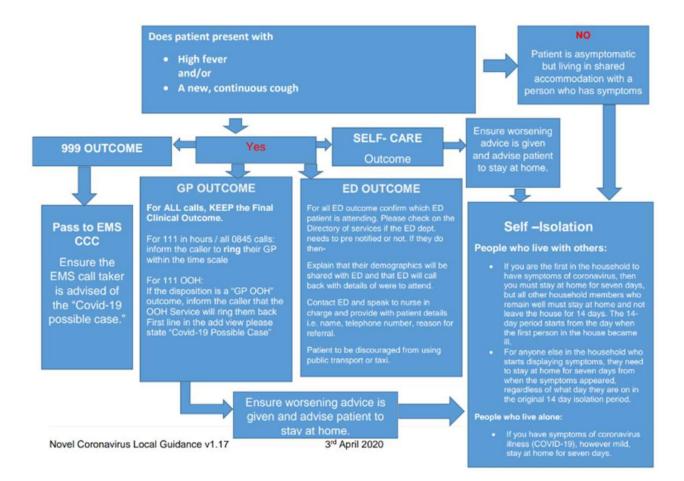
202. As stated above, during the pandemic the NHS 111 Wales service experienced significant peaks and sustained increases in activity both in and out-of-hours. WAST introduced a new front end call assessment process and improved call handling technology to signpost callers quickly to the pathway they needed. Staff who were able to work from home were provided with equipment to enable this and WAST embraced the roll out of Microsoft 365 which facilitated a smoother transition to virtual working.

- 203. After a successful trial from June to August 2020, WAST also introduced a new role of 'receptionist' into the call handling process the 'Receptionist Model'. I exhibit a Plan, Do, Study, Act ("PDSA") performance analysis of the trial at Exhibit JK/92 (INQ000373238). In short, the receptionist role was developed as a response to the significantly higher demand seen on the 111 service in the pre-pandemic period. Many of these calls did not need to be put through to a call handler but could be redirected elsewhere, for example to the online symptom checker or NHSDW Health Information services.
- 204. The receptionist role was designed as a pre-triage sift, as shown in the diagram below (taken from the PDSA performance analysis). Callers would first be put through to the receptionist, who would ask a few simple questions to identify if the caller needed to be put through to a call handler. If so, they would be put into the queue. If not, they could then be redirected elsewhere. This reduced the time taken to answer a patient's call. Feedback also suggested that people were happier to queue having first spoken with someone than they would have been if they were simply placed in the queue, and so call abandonment rates reduced. Additionally, this process ensured that the most unwell patients who required their care to be escalated to the 999 service or an Emergency Department were identified sooner than would otherwise have been the case.



205. Prior to the pandemic WAST operated NHS Direct and 111 services from Thanet House in Swansea, Vantage Point House in Cwmbran, Snowden House in Bangor and Ty Elwy in St Asaph.

- 206. In addition to WAST's 111 recruitment drive, WAST was also able to expand the available contact centre capacity both for live operations and training. This included space in the Carmarthen 999 control room, Thanet House, Snowdon House, Swansea 111 training space, St Asaph 111 training and operational space and significant expansion within Vantage Point House, Cwmbran. This expansion supported the training requirements for those recruited, allowed us to expand the size of the contact centre operations and facilitated the social distancing requirements which were in place.
- 207. As shown in the hierarchy of documents discussed above, specific guidance was created in relation to the handling of 0845 and 111 calls. In particular, the CCC SOP in section 5 contained advice in relation to the impact on 111 services of 'No Send' outcomes arising out of Protocol 36, calls originally made to 999 which were then passed to 111 and the impact of surge demand and how to deal with it. The CCC SOP also covered "Clinical Triage" in section 6.
- 208. There was also a document titled "NHS Direct Wales/111 Local Guidance for Management of COVID-19 Calls" (Exhibit JK/93.01 JK/93.02 (INQ000275108; INQ000275099)). This was first created on 31 January 2020 and was updated several times before v1.17 was released on 03 April 2020. It advised call handlers in relation to the key messages that should be given to callers, in particular in relation to self-isolation. It included at Appendix 1 a symptomatic patient flow chart, showing what the appropriate outcome was for various scenarios. This is reproduced here:



- 209. WAST's Monthly Integrated Quality and Performance Reports ("MIQPR") recorded the data in relation to calls made to the 111 service and NHSDW. For example, the MIQPR from April 2020 shows on slide 4 the Total Calls made to NHSDW and the 111 service, the percentage of those calls that were abandoned after 60 seconds and the triage performance according to the 111 service priority (**Exhibit JK/94 (INQ000373241)**).
- 210. Slide 4 of the exhibited MIQPR highlighted that in March 2020 there had been 103,285 calls to the NHSWW/111 service, compared to 30,900 in March 2019. Welsh Government advice changed from calling NHSDW/111 to visiting the website. Following this, in April 2020 call demand reduced to 52,263 calls. Because of the very high call demand, in March 2020 the call abandonment rate peaked at 43.3%, reducing to 13.4% in April 2020. This reduction was linked to the change in Welsh Government advice on visiting the website.

211. The analysis in slide 4 also noted that *The highest priority* of callers (*P1CT*) continued to receive *their definitive clinical assessment* starting *within* one *hour* above *the* target of 90%, *with the exception of* March 2020 when it was just *below* at 89.3%.

<u>NEPTS</u>

- 212. From the beginning of the pandemic, the NEPTS service saw a significant reduction in activity because of a drop in the volume of planned care and outpatient appointments delivered by Health Boards. Prior coordination practices of the service's operational resources changed during this period as fewer patients were able to be transported per vehicle because of social distancing requirements. This reduction in capacity offset a proportion of the reduction in demand.
- 213. The requirement to provide formal AQI for NEPTS (Ambulance Care) activity was suspended at the start of the pandemic by Welsh Government (see paragraph 48), as such there were no targets within the Delivery Framework. Internal reporting and review of performance and activity measures continued throughout the period of suspension which ended in November 2020. The report for Monthly Integrated Quality and Performance Annex 1 Top 20 Dashboard for December 2020, which is a feature of the MIQPR (Exhibit JK/95 (INQ000373242)), did provide a partial update on NEPTS. In summary, it confirmed the reduction in patient transport activity though noted that it had started to increase and that social distancing requirements limited capacity. Reporting of Welsh Government targets and AQIs restarted on 19 November 2020, at the request of Welsh Government.
- 214. On 08 March 2020, WAST released "NEPTS COVID-19 Journey Booking & Management Process", as part of the NEPTS SOP. It was updated several times before version 1.12 and was approved on 17 April 2020. A chronology of the changes made are visible on page 2 of the document (Exhibit JK/96 (INQ000373243)).
- 215. The purpose of this document was:
 - a. To provide clear systems to establish and subsequently manage journey requests for NEPTS patients that are confirmed to have or are suspected of having Covid.

- b. To provide guidance to NEPTS crews and volunteers on the process to follow when responding to journey requests involving NEPTS patients with suspected or confirmed Covid.
- c. All external providers will adhere to this guidance where it is practically possible, accepting that vehicle configuration may hinder this.
- 216. It was constructed around four key stages, on which guidance was provided:
 - a. Covid booking filter
 - b. Verification and journey management
 - c. Face to face assessment at journey stage non Covid and suspected or confirmed Covid
 - d. Decontamination of vehicles after completion of journeys
- 217. In addition to this, Action Cards were produced for NEPTS staff in respect of journey booking and management, as part of the SOP. This document was released on 08 March 2020 and further updated on 19 May 2020 and 22 July 2020 (Exhibit JK/97 (INQ000373244)). Its purpose was:

"[to support] the WAST COVID-19 Guidance - Incident Response document with more detail on operating procedures required in the various departments of NEPTS. The purpose being to provide clear standard operating procedures (SOP's) when receiving, filtering and transporting essential journey requests for NEPTS journeys from patients and health care professional during the COVID 19 Pandemic.

The target audience is all internal WAST staff and external NEPTS providers to follow when responding to journey requests involving NEPTS patients with suspected or confirmed COVID-19."

218. The Action Cards explained that a Covid Patient Needs Assessment ("PNA") had been developed which was designed to capture the current health condition of the relevant patient. The PNA was subsequently updated as necessary. On 31 December 2020, for instance, it was recommended to the SPT that the:

"NEPTS PNA be updated to reflect the change from 14 days to 10 days Covid isolation period. The document reflecting this, "NEPTS PNA Isolation Period Change" (Exhibit JK/98 (INQ000373245)).

219. Further, the Operations Directorate shared a "COVID-19 Update" on 01 May 2020 (**Exhibit JK/99 (INQ000373246)**) which advised that NEPTS staff may be asked to support a clinician in a Rapid Response Vehicle. It set out what would be expected of NEPTS staff during such trips, including that they must only operate within the limit of their scope of practice and training.

D. <u>Staff / staffing</u>

220. In addition to what I have said at the start of this witness statement, I would like to pay tribute once again to all staff and volunteers working for WAST and the tremendous effort they all made during the pandemic to provide essential health care/provision to the population of Wales.

Staffing Levels

221. I am asked to provide WAST's staffing levels by organisational areas as at 01 March 2020. The summary table below outlines the number of full-time equivalents by staff group.

Staffing Group	Sum of FTE (Full-time Equivalent)		
Add Prof Scientific and Technical	0.20		
Additional Clinical services	1503.13		
Administrative and Clerical	543.96		
Allied Health Professionals	1067.89		
Estates and Ancillary	56.97		
Medical and Dental	1.00		
Nursing and Midwifery Registered	165.45		
Grand Total	3338.60		

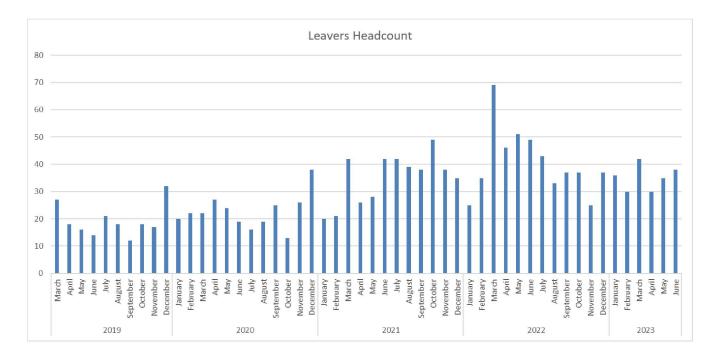
222. Additionally, I exhibit a spreadsheet from WAST's Electronic Staff Record ("ESR"), providing this information by area of work at **Exhibit JK/100 (INQ000373247)**.

- 223. One aspect of WAST's response to the pandemic was a significant recruitment campaign. The results of this were set out in the APR for 2020/21 (Exhibit JK/101 (INQ000373248)) as follows:
 - a) 136 FTE front line staff to join the Trust to support EMS response (in addition to business as usual recruitment and training of over 500 front line staff).
 - *b)* Over 90 staff to deliver on the mobile testing unit workforce requirements across Wales.
 - c) Over 60 urgent care assistants to support the opening of the Grange University Hospital and their transfer and discharge service; and
 - d) Over 90 call takers and to work towards recruiting 55 clinical advisors to support the roll out of the 111 and Contact First service across Wales and to meet the increase in call demand.
- 224. I set out in the table below the change in workforce numbers from 2019/20 to 2020/21, which was included in the APR:

Category	2020-21	2019-20	Variance	% Increase
Additional Clinical Services	1746	1464	282	19.26%
Additional Professional, Scientific & Technical	1	0	1	N/A
Administrative & Clerical	551	517	34	6.58%
Allied Health Professionals	1104	1055	49	4.64%
Estates & Ancillary	61	58	3	5.17%
Medical & Dental	1	1	0	0.00%
Nursing and Midwifery	171	165	6	3.64%
Total	3635	3260	375	11.50%

225. Despite the increased staffing levels, WAST's plan thereafter was to recruit further staff. I exhibit the Integrated Medium Term Plan 2021/22-2023/2024 at **Exhibit JK/102** (INQ000373249). Within this Plan it was highlighted that the Demand and Capacity Programme for 2022/23 would *"include recruitment of a further 127 FTE staff to close the relief gap"*.

- 226. Over the course of the pandemic, WAST staff understandably became exhausted from the seemingly unrelenting waves of infection as well as the frequent and unexpected changes to their working arrangements compounded further by seasonal pressures (both summer and winter) and extended hospital handover delays (hospital handover lost hours: December 2019 13,815; December 2020 11,709; December 2021 18,748 and December 2022 32,097. The 32,097 equates to 37% of the Trust's conveying ambulance production) This inevitably led to higher-than-expected attrition and absence rates and created challenges with recruitment and retention generally.
- 227. Whilst WAST saw an initial reduction in absence rates from March 2020, winter pressure (2020) saw an increase with levels fluctuating throughout the pandemic but remaining high. At times, the pandemic impacted WAST's ability to fully resource and deliver services generally because of staff absence, which was exacerbated particularly when staff had to isolate with symptoms, having tested positive for Covid or having been in close contact with a positive case.
- 228. The chart shown in **Exhibit JK/180 (INQ000410462)** sets out the overall impact to operations during the pandemic and attributable to staff absence. The trend broadly followed community transmission rates. The data includes all Covid-related absence i.e. confirmed cases, those with symptoms, carers leave etc.
- 229. The table below sets out the attrition rate one year prior to and one year after the specified period. In March 2022 the Trust reported a significant increase in retirements (29) compared with 2020/21 (7) and (10) in 2022/23. Of the 29 that formally retired, 19 returned on other contracts such as retire and return and bank. On ESR these staff will still show as leaving the Trust and we will be shown as new starters.



Allocation / Redeployment

- 230. As I have already said, at the outset of the pandemic, WAST was reoriented to focus on frontline services. Non-patient-facing services were deprioritised. In terms of patient-facing services, the biggest area of demand in the first wave was on the 111 service, due to members of the public calling for advice and information relating to Covid symptoms. There was a slight reduction in the demand on the EMS in the first wave, likely because of a combination of factors, including an apprehension by the public to attend hospital with a novel virus in circulation, reduced people movement as a result of the lockdown naturally led to a reduction in activity, and that the general public may have been allowing the NHS space to prepare and respond to the pandemic.
- 231. A report was provided to the EPT on 13 April 2020 which included information on the additional staff resources that were required during the course of the pandemic (**Exhibit JK/103 (INQ000373250)**). This report provided that *"a total of around 90 staff from corporate Directorates have been deployed into…core service areas"* and that a *"further* 29 have yet to be redeployed with further staff who may return from absence, including self-isolation".
- 232. In addition to people being redeployed into roles that were contributing to the 6 priorities established during the pandemic, some members of staff were suitable candidates for

redeployment because they were at increased risk of Covid. This was set out in the Covid-19 Employment Bureau Deployment Guidance, dated 27 April 2020, which I exhibit at **Exhibit JK/104 (INQ000373251)**.

- 233. My view on reflection is that, if anything and with the benefit of hindsight, we went slightly too far with redeployment in the first wave, did not go far enough in the second, and achieved an improved balance in the third. Feedback from colleagues from the first wave reflected that this was not a positive experience for all, which was mainly due to the speed that colleagues had to move, training limitations and underutilisation. This without doubt limited the pool of resource for the further waves. The Trust had also commenced work that had been paused through the first wave, requiring colleagues to remain in substantive posts.
- 234. The number of people redeployed between 01 March 2020 and 30 August 2022, as well as where they were redeployed to, is included in the following table.

- Operations – 2 - Op	S – 33 gistics – 2 dical and Clinical – 2 D – 1 changes to Department – 37 onatal – 1 PTS – 6 PTS CCC/NETC - 2 U – 2 erations – 34 D - 1
	D - 1

Steps to increase staffing levels

- 235. The response to the pandemic included a recruitment campaign called a "call to arms". The campaign was launched in March 2020 and led to more than 1,000 applications. Details of this recruitment campaign were set out in a report for the EPT to consider at the meeting on 13 April 2020. By early April 2020, several new recruits had begun training in the priority areas of call handling and 111 clinicians.
- 236. On 01 April 2020, the EPT decided that all new staff would be hired as 'bank staff', rather than being hired on short-term fixed contracts. This would best provide flexibility for both WAST and its new staff, given the uncertainty and unpredictability of future changes in demand and capacity. The Trust took the learning from the Health Boards who had actively recruited additional staff on fixed term contracts and often did not have suitable areas to deploy them to.
- 237. Other steps taken to increase staffing levels related to the training and education of students and clinicians. The training of EMS clinicians at the level of Emergency Medical Technician (EMT) pre-pandemic was a four-month face-to-face programme, but this changed at pace to a virtual classroom which enabled 365 of the EMT and urgent care colleagues to continue their training and join other colleagues on the frontline. Students were also quickly provided with laptops and appropriate ICT. For roles that necessitated a greater amount of classroom delivery, WAST worked in partnership with Swansea University to secure large spaces that enabled delivery in an infection-controlled environment. The duration of the training remained the same, but the mechanism of delivery changed to ensure training was not interrupted but was undertaken safely.

Staff Welfare

238. As expressed above, WAST is extremely proud of its staff and volunteers and the way in which they continued to work over and above in response to the pandemic when there was little known about the virus and the evolving situation. Staff and volunteers acted selflessly and potentially put themselves, their families and loved ones at risk to continue to provide compassionate, safe, and effective care to patients.

239. By the same token, WAST is also proud of the welfare support provided to all personnel. The following was set out in the APR 2020/21:

"Throughout 2020/21 the Trust retained a strong focus on staff well-being, in particular, PPE, homeworking, access to psychological support services and vaccination. As at 31 Mar-21 78% of front line staff had received their first and second vaccinations."

- 240. During the pandemic, the already established welfare offer was increased to provide the following support:
 - a. 24 hour 'Zen Rooms' at Clinical Contact Centres.
 - b. Additional support to colleagues and their families following the death of members of staff.
 - c. Virtual groups for shielders and those with long Covid which led to a Wales-wide NHS self-managed support group called "Road to Recovery".
 - d. Bespoke wellbeing sessions for teams, including mindfulness and Spaces for Listening.
 - e. A partnership with Project Wingman, a wellbeing charity that supports front-line healthcare staff.
 - f. An additional wellbeing presence during out of hours periods of increased demand.
 - g. In partnership with local organisations, the distribution of selfcare donations and a 'random act of kindness' raffle.
 - h. The regular contacting of all those shielding by phone whilst they were unable to attend the workplace.
- 241. Much of WAST's approach to staff welfare is set out in the Health and Wellbeing Strategy 2020-2024, which I exhibit at **Exhibit JK/105 (INQ000373252)**. This was drafted and updated from June 2020 onwards and set out WAST's vision of developing a strategy that:

"both provided WAST colleagues with support that was right for now and that had enough scope to adapt as the service develops over the coming years".

- 242. The focus on communications, discussed above, was also one of the ways in which WAST looked out for the welfare of its personnel. The regular bulletins and WAST Live Q&As were key to ensuring that staff felt informed and empowered to ask questions or raise issues of concern to them. WAST Live was also important in maintaining leadership visibility so that staff felt that we were there for them.
- 243. In addition to the above, the British Red Cross ("BRC") provided pastoral support to WAST crews and their patients who were delayed outside hospital Emergency Departments. BRC staff would provide this assistance at least three times an hour. Their support included, but was not limited to, the following:
 - a. Ensuring that WAST crews and their patients had access to hot and cold drinks.
 - b. Ensuring that WAST crews and their patients had access to food and light refreshments.
 - c. Liaising between WAST crews and ED staff to provide updates and get queries answered.
 - d. Providing a 'listening ear' to WAST crews and someone else to talk to whilst they were waiting to handover their patient to ED staff.
- 244. The effectiveness of the support provided by the BRC staff during the pandemic is demonstrated by the number of crew support interventions which they undertook from February 2021(1,000 per month) to February 2022 (4,000 per month).
- 245. WAST also implemented the guidelines produced by the Association of Ambulance Chief Executives ("AACE") dated December 2020 for promoting staff health, safety, and welfare (Exhibit JK/106 (INQ000373253)).
- 246. An important way in which WAST protected personnel was through the provision of PPE. This is discussed in more detail below but, for example, following careful consideration of all the relevant guidance, WAST made level 3 PPE available to its frontline staff, which was over and above that required by Public Health Wales. Staff fed back that they felt safer with this level of PPE. Similarly, the handover delays at Emergency Departments

due to pressure in the system, particularly in the second and third waves, not only adversely affected WAST's ability to respond to patients in the community, but also unfortunately resulted in WAST staff spending prolonged periods of time in direct contact with Covid positive patients in the confined space of the ambulance (December 2019: average handover time 56 minutes; December 2020 58 minutes; December 2021 one hour and 24 minutes; and December 2022 two hours and 29 minutes). Whilst this was unavoidable, WAST staff were, again, provided with enhanced, high-grade PPE which mitigated the risk of contracting Covid whilst in confined spaces with Covid positive patients.

- 247. WAST changed its Employee Assistance Programme (EAP) provider based on service user feedback and usage. In March 2021, WAST made a significant investment in a new EAP provider 'Health Assured', as well as an App 'Thrive' in May 2021 which was downloaded to all Trust-issued iPads. WAST staff also had access to 'Silvercloud', online cognitive behavioural therapy ("CBT") courses with a live coach, together with Health for Health Professionals (now called 'Canopi Wales'), which was a referral service for CBT.
- 248. In addition to the above, WAST staff also had access to The Ambulance Services Charity ("TASC") which provided additional support and worked closely with UK ambulance services to develop a comprehensive Employee Suicide Prevention Plan ("ESPP"), This evolved into the effective Crisis Line which uses the Collaborative Assessment and Management of Suicidality ("CAMS") framework. All these guidelines are freely available on the AACE and TASC websites: Suicide Prevention in Ambulance Services (Exhibit JK/181 (INQ000410463)) and The Ambulance Staff Crisis Phoneline managed by TASC (Exhibit JK/182 (INQ000410464)).
- 249. Whilst individuals were shielding, the wellbeing team, alongside redeployed Organisational Development colleagues, contacted all those shielding to ensure they remained connected and supported. Many individuals accepted offers of continued contact. WAST collected donations of laundry bags and distributed them alongside donated wellbeing products to all staff, so they were aware of the public support for their work during lockdown. Suicide First Aid training was made available for all staff and completed by 235 people. Mental health events and awareness sessions were advertised across the organisation including those from 'NHS Horizons' which colleagues were able to access in virtual common rooms specific to ambulance services.

- 250. As it became clear that some staff members were experiencing symptoms of 'long Covid', WAST set up a Long Covid Support Group ("LCSG") that grew to include all Wales NHS services and one English Ambulance Trust. It subsequently became self-managed by members and moved to a different platform, as it was initially on Microsoft Teams. In place of this WAST developed the Circle of Support Group ("CSG") for all long-term health conditions that staff experienced.
- 251. WAST was requested to offer support to staff in promoting the importance of Covid guidance and introduced Covid courtesy together with a video of people explaining why it was important to them that everyone followed the rules. This was also reinforced at Christmas to encourage celebrating in the Contact Centres in a different way, and not sharing food or using decorations.
- 252. Other measures introduced to support staff welfare included the following:
 - a. 'Project Wingman' was a program from British Airways where cabin crew and pilots not being used for flights, having all been grounded, attended premises, and provided tea, coffee, cakes and refreshments for WAST staff. This program attended the Vantage Point House site (Cwmbran) and was well received, resulting in WAST's own initiative 'Project Zen', which has become a permanent wellbeing space on several sites.
 - b. The Wellbeing Team held regular face to face drop-in sessions at all CCC sites and weekly virtual drop-ins and workshops on stress, anxiety, and sleep and a 'Living Life to the Full' course was delivered regularly during the pandemic and now as requested. WAST staff were also encouraged to share their stories, including the crew mate and brother of the first colleague sadly lost to Covid.
 - c. Two Occupational Health and Wellbeing vans visiting local Emergency Departments every week, where staff could access support from the team and information on services available to them, including vaccinations and support groups.
 - d. Peer Support network and a chaplain were in place throughout Wales, visiting different sites as well as being available by phone and Microsoft Teams.

- e. Wellbeing dogs visited various locations as soon as Covid restrictions allowed and were very well received. WAST now has the first UK ambulance wellbeing dog.
- f. WAST developed a collaboration with 'Mind Over Mountains', which has now been added to the College of Paramedics UK wellbeing programme.
- g. 'REACT' Mental health training was rolled out for managers and staff to understand and recognise a decline in their mental health and how to improve/communicate this to others. Devised by 'March on Stress' in conjunction with NHS England ("NHSE"), the training is underpinned by psychologically sound principles and the REACT_{MH} technique comprising of: Recognise, Engage, Actively listen, Check risk, and Talk about specific actions. The REACT_{MH} technique is well-established and has been delivered for the past three years to thousands of people across public and private sector organisations. This was used in conjunction with the Mental Health Continuum developed for ambulance services.
- h. 'SWAY' (Microsoft Presentation Program) document/newsletter and an improved intranet page to easily aid staff in seeing what is available to them regarding support.
- i. Mindfulness and one minute breathing exercise cards provided to call centre staff to utilise during times of high pressure.
- j. Winter wellbeing information packs to support staff during the winter and festive period provided additional winter/Christmas drop-ins to all call centres, to A&E and ambulance stations to meet with frontline staff.
- k. Personal Appraisal Development Reviews were changed to ensure that the focus was on wellbeing rather than performance.
- I. Extensive work was done with Health Boards to ensure at each stage of the vaccination programme that WAST staff were prioritised.
- m. When schools were closed, flexibility was provided to working parents including shift changes and different working hours to accommodate the childcare/parenting challenges faced by staff.
- n. Annual flu programme facilitated by Occupational Health and Peer vaccinators.

o. Public and local business support was also extensive in the first wave with multiple food donations at all sites throughout Wales.

Measures to protect staff and volunteers most at risk (e.g. Black, Asian and Minority Ethnic and clinically vulnerable)

- 253. Although not relating to a particular group of staff, WAST sadly experienced the death in service of four colleagues because of Covid. This had a profound impact on the colleagues of those who died and exacerbated the fear and anxiety felt by staff generally.
- 254. One of the central aspects of WAST's measures to protect staff most at risk was the guidance for managers and staff on the All Wales Covid-19 Workforce Risk Assessment Tool, which I exhibit at **Exhibit JK/107 (INQ000373254)**. This Tool was launched by the Welsh Government and rolled out in WAST to all staff from 22 July 2020 to identify those working in the NHS in Wales who were at higher risk if they contracted Covid. The tool was a self-assessment guide intended to *"start the conversation between colleagues and their line manager"*. Included in the risk factors were age, gender, ethnicity, and underlying health conditions, amongst others. Action was then to be taken by managers because of staff risk scores identified by the tool, including home working and redeployment for those at high risk. Staff who were deemed to be 'clinically vulnerable' shielded. We also had to stand down a number of volunteers as they were in the 'vulnerable' category.
- 255. In addition, a specific risk assessment was introduced in line with WG recommendations in relation to WAST's Black, Asian, and minority ethnic staff ("BAME") on 04 May 2020, which I exhibit at Exhibit JK/108 (INQ000373255 INQ000373257; INQ000236796). This was also introduced on an All Wales basis as it had been identified that the NHS Black, Asian, and minority ethnic workforce had been disproportionately affected by Covid, both in terms of morbidity and mortality. As set out in the risk assessment, 40 members of WAST staff had identified themselves as Black, Asian, or minority ethnic on the NHS ESR system, but it was recognised that there may be other members of staff were contacted directly to conduct a risk assessment, then a communication was sent out to identify anyone else who might need to undertake the risk assessment. Additional

communications were distributed through the communication channels, requesting all staff to update their ESR information.

- 256. As the Welsh Government's advice changed in relation to Covid, the risk assessment was also revisited, and scores and actions put in place in line with the updated advice.
- 257. Furthermore, WAST introduced separate guidance through a variety of Action Cards, which set out measures in place to protect staff in particular situations or with particular risk factors. For example, guidance was introduced in relation to staff:
 - a. With underlying health conditions specifically (Exhibit JK/109 (INQ000373259))
 - b. Who were pregnant (Exhibit JK/110 (INQ000373260))
 - c. Aged 70 and above (Exhibit JK/111 (INQ000373261))
 - d. Unable to attend the workplace due to caring responsibilities (including school closures) (Exhibit JK/112 (INQ000373262))
 - e. Who were off sick due to symptoms of Covid (Exhibit JK/113 (INQ000373263)).
- 258. WAST also felt that it was beneficial to share information with staff to help reinforce national guidance, such as the 25 March 2020 guidance on understanding the 'Stay at Home, Protect the NHS', social distancing', and shielding advice for older people and vulnerable adults, to orientate staff to the rapidly changing picture (Exhibit JK/114 (INQ000373264)).
- 259. Verified EMS incident demand was 16% lower in April and May 2020, compared to April and May 2019. Whilst a decrease in demand was recorded, and the 'Stay at Home, Protect the NHS' published guidance and subsequent messaging undoubtedly resulted in a degree of demand suppression, it is not possible to quantify the impact of this messaging or attribute the change in demand solely to the guidance/messaging.
- 260. To emphasise the importance that WAST attached to protecting its 'vulnerable' members of staff, WAST introduced a consolidated Workforce and Organisational Guidance, produced on 05 October 2020, which I exhibit at Exhibit JK/115 (INQ000373265). This guidance dealt with not only measures in place to protect staff

who were at most risk but also included guidance on matters such as home working and workplace distancing. The homeworking guidance set out how WAST would keep staff updated and disseminate information to them, which I have discussed in detail above. This guidance went beyond the measures introduced to protect WAST staff directly and dealt with staff who, whilst not being at increased risk themselves, lived with or cared for people who were at increased risk.

261. Following a risk assessment on the deployment of Community First Responder ("CFR") volunteers, several measures were put in place to protect volunteer welfare. This included the cessation of deployment via 'GoodSam' (a smart phone application that uses GPS to locate and alert trained and approved first responders to attend certain 999 calls such as cardiac arrests) given that not all of the responders were equipped with PPE, no send to red calls, turn off of the auto allocation functionality for CFRs in the CAD, CFRs not to be sent to any Covid related calls, the introduction of 4 additional health and safety questions for volunteers to ask on arrival at scene, advice to withdraw following dynamic risk assessment in the event that incident appears covid in nature and the provision of training in donning and doffing. All Fire and rescue personnel were stood down from co-responding for the duration of the pandemic.

The long-term effects of the pandemic on staff

262. WAST created and sent out a workplace survey on numerous occasions to better understand the long-term effects of the pandemic on staff and produced a report entitled The Story So Far (June 2020) (**Exhibited under JK/51 (INQ000373111)**). Responses included thoughts about communication, pressures pertinent to different areas, for example, those working at home frustrated by back-to-back Teams calls. There were positive comments about wellbeing support and accessing it and many people felt that managers had been supportive. Suggestions from the survey included continuing with WAST Live, maintaining the cross organisational working, increasing digital literacy, and restarting leadership development. The below image summarises the key findings, all of which were considered. Changes such as committing to leadership development with a focus on wellbeing, including wellbeing questions as part of the performance appraisal and development review ("PADR") process, and paying attention to the employee experience at work were implemented to promote staff health, safety, and welfare beyond the pandemic.

END	AMPLIFY
 Scheduling 'Back to Back' Zoom meeting The use if all reusable cutlery in all offices 	 CEO Live zoom sessions – ability to have questions answered in real time and give opinion Using Zoom sessions including social interaction at the beginning Schedule breaks between zoom meetings Matrix working – working across directorates Apply similar model for flu/winter pressures Agile way of working Rapid decision making by the Executives Apply the new ways of delivering training to other parts of WAST Update relevant policies to reflect new ways of working Support and development for working at home including appropriate equipment Create the culture that working from home can continue Build on existing social distances measures already in place, improved cleaning procedures and reconfiguration of furniture across the organisation Access to PPE Exiting ICT support Access to and education of the Well-being service currently available in WAST
LET GO	RESTART / START
 Move away from departmental structures and introduce cross functional teams 	 Normal way of working Organisational priorities Switch on education, governance and well being Managers working from the Offices Development for staff to be able to utilise 365 fully Preventative and precautionary activity - Covid/antibody testing, temperature checks when entering the workplace It the intention is to use MOD and F&RS Colleagues going forward would be advantageous for them to have Blue Light Training Rigorous monitoring of Team WAST Facebook to ensure all on the group still work for WASTI Investment in CFR Development Development and support for Leaders and Managers to support embedding Compassionate leadership

Estates

- 263. Covid-19 risk assessments for all premises across Wales, commencing with CCC buildings, were undertaken in partnership with local management teams, the Estates department, Health and Safety colleagues, as well as Trade Union representative bodies. These premises risk assessments identified that social distancing within some facilities was difficult to achieve. This resulted in the need for additional space. Subsequently it was determined that all existing CCC facilities required an increase in the footprint which was managed at each location. Where such expansion was not possible, additional buildings were sought with various solutions agreed with community groups, charities, private and public landlords.
- 264. The increase in the estate capacity allowed social distancing to be achieved for operational teams to continue to serve the public. COVID related signage 'How to guide' (Exhibit JK/116 (INQ000373266)) was also displayed in all sites. In addition to the above, measures were also taken to significantly enhance cleaning of our estate, with particular focus on all clinical contact centres where all high volume touch points were

cleaned on a regular basis throughout the pandemic. Advice was also provided to staff to ensure that workstations were cleaned on each shift changeover, as detailed within **Exhibit JK/117.01 – JK/117.02 (INQ000373267 – INQ000373268)**.

- 265. The Welsh Government extended the sick pay arrangements for WAST staff suffering with long Covid to remove a detriment to these colleagues in support of taking absence from work to prevent the spread of Covid. WAST also developed an Action Card dated 22 March 2021 on managing long Covid sickness absence (Exhibit JK/118 (INQ000373269)).
- 266. There has undoubtedly been an impact from a mental health perspective to some extent for all staff. However, WAST has had very few staff who have felt unable to return to their patient-facing role because of anxieties regarding contracting Covid again. Those colleagues who have been unable to return to their previous patient facing role have not only been supported but redeployed to non-patient facing roles. Three members of staff have been permanently redeployed since October 2022. Sadly, we have had 2 colleagues who have left WAST because of the continued effects of Covid.
- 267. WAST also made some HR-related interventions. For example, specific arrangements were put in place in March 2020 in response to the exceptional sickness absence situation prevailing as the pandemic took hold across Wales. To support WAST and NHS Wales staff, open ended sickness absence arrangements were put in place which provided for full pay from day one of absence.
- 268. The term and categorisation of 'long Covid' emerged during 2020 and it was felt that while the system of an open-ended measure had been appropriate at the start of the pandemic, the arrangements needed to be within the agreed terms and conditions of service for both Agenda for Change and Medical and Dental staff. At the same time, it was recognised that the impact of long Covid was only beginning to be understood, as well as the different approaches individuals required to support the management of their condition and their rehabilitation.
- 269. Accordingly, it was felt that individuals would need time to support their recovery and for interventions to be in place to support, enable and facilitate a return to work. As such, from 01 December 2020, normal sickness absence arrangements with enhanced

provisions were put in place and these are set out in the "Covid-19 (Coronavirus) Frequently Asked Questions for NHS Managers and Employees" (**Exhibit JK/119** (**INQ000373270**)). These arrangements provided for the absence timeline for all individuals absent due to Covid to be re-started so that they received up to 12 months' sickness absence on full pay (irrespective of the normal entitlement to contractual sick pay).

- 270. As at the end of the specified period, there were still individuals who remained absent from work with Covid sickness cited as their reason for absence. As of end of June 2022 the Trust had 26 staff members on long term sickness (over 28 days) and 84 staff reporting short term absence (less than 28 days). Those colleagues still suffering with symptoms associated with Covid require individual bespoke support regarding their current health situation, so that hopefully they can recover sufficiently to return to work. As such WAST has developed a comprehensive approach to case management and to maximise the rehabilitation opportunities (Exhibit JK/120.01 JK/120.04 (INQ000373271; INQ000409011; INQ000373273 INQ000373274)). This includes the development of a framework which builds on the arrangements set out in the Managing Attendance at Work Policy ("MAAW") (Exhibit JK/121 (INQ000373276))
- 271. All Wales guidance was received throughout the pandemic on how best to support colleagues (developed in partnership). Some of the features of the framework discussed above included:
 - a. Highlighting the importance of regular communication with the individual and arranging for them to visit the workplace to keep in touch with colleagues.
 - b. Increased access to health and wellbeing/occupational health services for the individual.
 - c. The development of bespoke phased return plans which may enhance existing provisions such as multiple phased returns if an individual needed to combine their return with several episodes of sickness absence as part of their managing and sustaining their return to work.
 - d. Arranging refresher skills courses and holding career conversations.

e. Arranging for sick pay provision after 01 July 2022 when full pay was scaled back.

Covid Testing of Staff

272. The process of testing staff for Covid was, by definition, a new and evolving process which, as time went on, improved. At the outset of the pandemic there was some confusion and inconsistency as we learned the importance of the ability to test staff quickly, reliably and receive results promptly to ascertain if staff could or should be in the working environment.

Test, Trace, Protect

- 273. With the benefit of hindsight, I consider that the initial roll out of testing was inadequate and sub optimal. To an extent we at WAST felt the need to 'lobby' somewhat for our inclusion. The access to and coordination and flow of information was also initially clunky. However, I understand the reasons for this. The system was set up at speed and in my view, it was, unfortunately, inevitable that there would be a slow start and some teething problems. Once the testing regime was in full flow and on a regular footing it was satisfactory, and the Health Boards were responsive with improvements. WAST staff had access to polymerase chain reaction ("PCR") tests and lateral flow tests ("LFTs").
- 274. The initial phase of staff testing centred around a manual data collection and submission of a spreadsheet-based entry approved by the WAST Medical Director daily via the Trust's Covid Incident Coordination Centre ("CICC"). This enabled staff on the spreadsheet to access testing at various sites led by Health Boards across Wales. Test results then were fed back to the CICC via email and staff were duly notified and provided with appropriate advice. Further details of this process can be found in the Update on the Procedure for COVID-19 Testing for Health Care Workers 24 March 2020 (Exhibit JK/122 (INQ000373277)) and the update from the WAST Operations Directorate sent to staff on 16 April 2020 (Exhibit JK/123 (INQ000373278)).
- 275. WAST created a Vaccination Delivery Group ("VDG") in September 2020. This group engaged with the Welsh Vaccine programme and acted as the conduit back into the Trust to deliver 2 outcomes. Firstly, to secure vaccines from the wider system for

WAST's staff, and secondly to communicate, track vaccine receipts and provide information to support decision making within the Trust. WAST secured and provided data to NHS Wales Informatic Service ("NWIS") for entry into the Welsh Immunisation System ("WIS"). Individual Health Boards had various mechanisms in place to book attendance for vaccines, with Velindre providing a service that was not bounded by any Health Board footprint.

- 276. The VDG directed individuals living within each Health Board area to utilise the booking mechanism used locally which did create some variation in approach for our people as there was no single national approach to booking. Agreement was made with the nearest Health Board for non-Welsh domiciled staff to access vaccines within their local area. Records of vaccines administered across Wales were reported daily initially and moving to a weekly report to WIS. This enabled WAST to track which staff, volunteers, military and first responder partners had received the requisite vaccines to ensure the full group (Group 2) had the opportunity to receive a vaccine. A dedicated communications strategy which provided the latest PHW updates/advice was in place on SharePoint. Additionally, a mailbox was set up providing 24/7 coverage to support individuals requiring vaccines and the bulk sharing of booking links when they became available from the Health Boards.
- 277. This process later evolved into staff contacting Health Boards directly to receive testing, which did not include the provision of test results back to WAST. Updated Guidance on the new online process for applying online for tests was issued to staff on 10 June 2020 (Exhibit JK/124 (INQ000373279)) and guidance on Accessing a Covid antigen test through the Health Boards was published on 24 September 2020 (Exhibit JK/125 (INQ000373280 INQ000373282)).
- 278. By December 2020, the introduction of Lateral Flow Devices ("LFDs") had been introduced across WAST. A Clinical Update on Lateral Flow Device Antigen Testing Kits was sent to staff on 21 December 2020 (Exhibit JK/126 (INQ000373283)), as was an Action Card on asymptomatic staff testing for Covid using LFDs (Exhibit JK/127 (INQ000373284)). These were followed by an FAQ document on 23 December 2020 (Exhibit JK/128 (INQ000373285)). With the introduction of LFD testing in December 2020 came the ability to report results directly to WAST via a QR code. This enabled WAST to monitor uptake and test results. This process continued throughout the next

two years although the central monitoring and reporting via QR was subsequently dropped and replaced with reporting via the NHS App, as LFT testing became more mainstream. An updated Action Card on asymptomatic LFD testing was issued to staff on 14 April 2021 (**Exhibit JK/129 (INQ000373286)**). This outlined that the LFT pack contained 25 test kits which was enough for 12 weeks with one spare device. Staff were required to complete the electronic reporting form which could be accessed via the QR code on the LFT kit after each test. The test took approximately 5 minutes to perform with results available approximately 30 minutes later.

- 279. Testing, self-isolation, and close contact isolation requirements also had an impact on staff attendance throughout the pandemic period. This was reflected in the abstraction rates in (Exhibit JK/130.01 JK/130.02 (INQ000373287 INQ000373288; INQ000373076; INQ000373082; INQ000373291 INQ000373299; INQ000275144; INQ000373078; INQ000373083; INQ000373303 INQ000373304; INQ000373077; INQ000373084; INQ000373307)).
- 280. The NHS Covid App was made available across England and Wales on 24 September 2020 and ultimately withdrawn on 27 April 2023. The App was a voluntary contact tracing programme for monitoring the spread of the pandemic. It included sending alerts to accounts who had been identified as close contacts of confirmed cases, directing individuals to isolate. This alert system was problematic for staff who had downloaded the App, enabled contact tracing, and then brought their mobile devices into the work environment. Phones would be left in a variety of locations including lockers, on desks, in bags, as well as being carried by individuals. For frontline staff provided with PPE, they may have been carrying their devices on their person. Despite the advanced technology in mobile devices, it was still not possible to distinguish between an owner who was in a Covid safe setting or wearing protective equipment from one who was not in such an environment. Healthcare professionals were therefore encouraged to deactivate contact tracing whilst in the workplace to minimise being alerted to isolate when this may not have been in fact necessary or required.
- 281. General guidance and instructions on testing came directly from the Welsh Government, though WAST produced Action Cards to explain the processes and procedures in terms of testing and access to testing (for example, see the WAST Test, Trace, Protect

Guidance and Risk Assessment Process Flow Chart of 06 July 2020 (Exhibit JK/131 (INQ000373308)).

- 282. WAST worked extremely hard to ensure that antibody testing was made available to its staff as soon as possible. For example, an update sent to staff on 29 June 2020 provided that Swansea Bay University Health Board had opened up antibody testing for WAST staff at the weekend (Exhibit JK/132 (INQ000373309)). Throughout the summer of 2020, the other Health Boards in Wales began to offer antibody testing for WAST staff. The arrangements for each Health Board (as at 20 August 2020) were set out in a consolidated document for ease of reference for staff (Exhibit JK/133 (INQ000373310 INQ000373311)). Those wishing to be tested were advised to contact their line manager who would inform their respective Local Pandemic Team so that a referral to the relevant Health Board could be made via email using referral forms which had been specifically created. Some Health Boards, such as Hywel Dda, advised that antibody testing was available to WAST staff whether they were on shift in the area but lived elsewhere or both worked and resided in Hywel Dda.
- 283. However, it is acknowledged that some Health Boards were not as prepared as others. For example, by August 2020 Powys Health Board was only in the development phase of putting together an implementation plan to enable antibody testing to be made available to WAST staff. For example, the Covid-19 Update dated 15 October 2020 following the *"first round of Covid-19 antibody testing clinics which were held throughout September"* for PTHB and Powys WAST staff, which I exhibit at (Exhibit JK/134 (INQ000373312)). Conversely, Swansea Bay and Cwm Taf Morgannwg Health Boards were ready and able to provide testing for WAST staff who worked in their areas (for example, see the Covid-19 Update dated 11 September 2020, in relation to Cwm Taf Morgannwg antibody testing, Exhibit JK/135 (INQ000373313).
- 284. In response to the rising community transmission of the Omicron variant of Covid across the UK, new guidance was issued by the Welsh Government in December 2021 (*Covid* 19 Update 21 December 2021), which I attach at Exhibit JK/136 (INQ000373314). This document provided clarification on several matters in relation to staff working in public facing roles namely:

- a. Staff would be strongly encouraged to undertake a LFT every day before they go to work.
- b. Staff, regardless of vaccination status or previous Covid infection, were advised to test at home in good time before their shift was due to start to allow the shift to be covered by alternative staff if the test was positive.
- c. All results (positive/negative/invalid) were to be reported via Report a Covid rapid LFT result. This was a vital part of the programme which supported the evidence-based policy decisions to be made.
- d. There was also a further requirement for all staff who attended care homes to provide a negative LFT within the last 24 hours to continue with their tasks.
- 285. As Governmental advice changed, WAST's policies and plans were updated to be consistent with the most up-to-date position. For example, it was a clear expectation that all staff and volunteers who came into physical contact with patients and service users had to complete a LFT before attending work/volunteer shift. In light of care homes having a policy of staff and volunteers providing confirmation of a negative LFT test in the last 24 hours before being granted access, WAST was provided with guidance on emergency access into care homes (Exhibit JK/137.01 JK/137.02 (INQ000469078; INQ000373316)).
- 286. To demonstrate the stringent application of testing for staff and volunteers during the prevalence of the Omicron variant of Covid, it was WAST's policy that where there was a failure to wear (correctly or at all) the recommended PPE during the care episode, the staff member would be considered a 'contact' and would have to follow the following steps as set out in the Guidance/Action Card on PPE Breaches (Exhibit JK/138 (INQ000373319)) which included the following:
 - a. The need to self-isolate for 10 days if they had a close contact with someone who was confirmed or suspected of having the Omicron variant of Covid.
 - b. Taking a PCR test on day 2 and day 8. The staff member was required to immediately arrange for a PCR test, either through their workplace

arrangements or via the NHS Test and Trace service and the result of this PCR test had to be negative prior to returning to work.

- c. After a negative PCR result, the staff member was required to undertake an LFT antigen test every day for the 10 days following their last contact with the case (even on days they are not at work).
- 287. WAST began the process of asking staff to return to working from offices and other work areas that had been vacated in favour of working from home in April 2022 (See Returning to the Office, Guidance for WAST colleagues 28 April 2022) which I attach at **Exhibit JK/139 (INQ000373320)**. To maintain the health and safety of all staff, WAST required staff returning to the office environment to take a lateral flow test before attending the office. Updated Covid Workforce Guidance was issued on TTP, self-isolation, PCR testing, and asymptomatic testing which provided clear advice and information about how and when to test as well as what to do in the event of a positive test result (**Exhibit JK/140 (INQ000373321)**).
- 288. Replacement LFT kits were able to be ordered by staff and volunteers via local stores as and when required. WAST was always keen to ensure that the provision of test kits would not impede the implementation of the stringent testing regime required of all staff and volunteers.
- 289. Ordering of LFT's was initially through Welsh Government Covid-19 Testing Cell. In April 2021 this changed to direct ordering through the UK Health Security Agency (HSA) sales-force portal. In December 2021 WAST requested additional supply of LFT's through NWSSP due to significantly reduced stock levels. This request was supported and our ability to request LFT's in a shorter delivery schedule from UKHSA was approved which rectified the supply issue we had experienced. At no time did WAST central supplies run out of LFT stock.

E Infection Prevention and Control ("IPC")

Ambulances

290. The main sources of IPC guidance were the World Health Organisation ("WHO"), UK Government, the Welsh Government, PHE, PHW and the AACE. WAST adapted this guidance as necessary to take account of any WAST-specific matters. Moreover, the

Trust was a member of the AACE and as such through that membership WAST had some input into the sector guidance which the AACE national ambulance infection prevention and control group formulated.

- 291. As such, although IPC was largely mandated by national and regional guidance, WAST was able to modify it to take account of local factors. In broad terms, IPC guidance was derived from the National IPC Manual and further formulated and assessed through the various sources identified above. WAST evaluated this through the pandemic management structure to determine if guidance should be adopted or modified in any way, then communicated to staff to ensure it could effectively be implemented within the organisation. All IPC guidance created or contributed to by WAST is included in the requested chronological list of documents which accompanies this witness statement.
- 292. Before the pandemic, WAST produced a guidance document entitled "All Things IPC" (Exhibit JK/141 (INQ000373322)). This was first published in May 2019 and its purpose was to provide key IPC information for WAST staff and an 'at a glance' guidance in relation to various clinical settings. This guidance was regularly updated throughout the pandemic, and an online 'All things IPC' training package was also delivered which staff could access through iPads with which they had been provided. WAST also produced posters and Action Cards as quick-reference material for staff, some of have been shared as exhibits accompanying this document. Similarly, WAST produced instructional videos on some of the IPC processes, such as how to don (put on) and doff (take off) PPE and clean certain equipment (Exhibit JK/52.01 JK/52.08 (INQ000373112 INQ000373119)).
- 293. On 05 May 2020, WAST published its "Covid Guidance on IPC & PPE" (Exhibit JK/42 (INQ000373088)). The purpose of this document, over and above "All Things IPC" was to give comprehensive guidance and information on IPC and PPE requirements and practices specific to WAST staff. The guidance was regularly updated. A second version was published on 25 January 2021 (Exhibit JK/43 (INQ000373089)) and a third version was published on 31 May 2022 (Exhibit JK/142 (INQ000373323)). This third version was amended to reflect the transition from the pandemic response to 'business as usual'.

- 294. Specific consideration was also given to IPC within ambulance vehicles as can be seen from section 15 of the IPC & PPE guidance. One of the key considerations was the question of vehicle decontamination. In particular, WAST set out two different approaches to vehicle decontamination depending on whether or not an AGP had been performed in the ambulance. An AGP was defined as any procedure that might result in the release of aerosols from a patient's respiratory tract. In the context of airborne diseases like Covid, AGPs were felt to pose a particular danger to staff who were to come into contact with patients. As such, the decontamination requirements were enhanced where an AGP had been performed, as set out in Appendix 2 to the IPC & PPE Guidance.
- 295. Ambulance decontamination was also one of the tasks for which WAST sought and received Military assistance (Exhibit JK/143 (INQ000373324)).
- 296. The need to find efficient cleaning/decontamination methods and equipment for ambulances was recognised early in the pandemic and was included as an 'action point' following the Executive Team meeting on 04 March 2020, the same meeting at which the PIP was formally triggered. Subsequently, the WAST IPC team was tasked to investigate alternative options for decontaminating ambulance vehicles in an efficient way. This led to the launch, in collaboration with the Small Business Research Initiative ("SBRI") for Wales, of a Covid 'cleaning challenge' with the Welsh Defence and Security Accelerator. This competition intended to find solutions to the problem of ambulance decontamination. WAST were informed that they had been successful in the award of funding on 24 March 2020. Further details of this can be seen in the EPT SBAR report dated 25 March 2020, which I exhibit at Exhibit JK/144.01 JK/144.04 (INQ000373325 INQ00037333). I also exhibit the brief which invited applications for the challenge at Exhibit JK/145 (INQ000373334)).
- 297. One potential solution which the IPC team identified by the end of March 2020 was 'Ultrasonic Atomisation', a service provided by a company called 'Hygiene Pro Clean'. In essence, the product dispersed a decontamination solution in a soft plume-shaped spray at a size of around 10-15 microns, thus achieving a uniform distribution of the

decontamination solution.¹ This project was delivered in the summer of 2020, and I exhibit the 04 November 2020 SBAR recommending that this innovation be adopted at **Exhibit JK/146 (INQ000373328)**. Along with SBRI, WAST received a St David Award for Innovation, Science and Technology in 2021.

Other WAST work environments

- 298. Measures were also put in place to prevent and control infection in the wider WAST estate, such as CCCs. These included rostering to reduce occupancy, homeworking, social distancing, the testing of staff, the wearing of masks (e.g., see the WAST update to staff dated 16 September 2020, exhibited at **Exhibit JK/147 (INQ000373340)** and related signage. WAST also opened additional sites for call handling, primarily to increase capacity, but also to allow for social distancing in call centres. WAST also increased the provision of sanitising wipes, hand sanitiser, anti-bacterial soap, and the level and frequency of cleaning provided by contract cleaners. Additionally, from May 2020, screens between workstations were introduced into CCCs (**Exhibit JK/148 (INQ000373341)**).
- 299. An early measure taken in March 2020 was to limit the crossover and, therefore, risk of the spread of infection between CCC staff and ambulance response staff. By way of example see the WAST Update to staff dated 12 March 2020 (Exhibit JK/149 (INQ000373342)). A lock down of CCC sites to non-essential visitors was also implemented by the time of the EPT meeting on 09 March 2020 took place (Exhibit JK/150 (INQ000373343; INQ000373044; INQ000373345)). On 24 March 2020, WAST had confirmed the position on workplace distancing and outlined some of the other steps taken to limit the spread of the virus (Exhibit JK/151 (INQ000373346)). This included sanitizing points, face masking of personnel in all areas apart from workstations, enhanced cleaning regimes of all high touch points, wipes provided for staff workstations, guidance on cleaning desks (an example can be provided), and screening which was introduced to workstations at a later stage. A comprehensive summary of the measures taken was supplied in the form of a memorandum to EPT on 30 April 2020 Exhibit JK/152 (INQ000373347).

¹ Hygiene Pro Clean provide further information on their website: https://www.hygieneproclean.com/emergency-vehicle-decontamination.

300. A further initiative implemented was a 'Covid-19 Safety Champions' scheme, the details of which can be seen in the notice which introduced the concept on 14 January 2022 (Exhibit JK/153.01 – JK/153.02 (INQ000373348 – INQ000373349). As WAST began to move to a situation where the population would be living with Covid-19, it was necessary to find a compassionate way to ensure people were still maintaining good practice regarding hygiene, infection prevention and control and distancing (if still required to control outbreaks). The Trust sought volunteers from across WAST sites in Wales, particularly where there were high densities of people, such as the CCC and 111 sites. The role was required to undertake reviews in relation to the control measures within these areas of work using a checklist and to remind individuals of the controls that needed to be put in place or that remained extant, escalating any concerns to line managers as required. Whilst WAST experienced some outbreaks following the introduction of champions in January 2022, the outbreaks were dealt with swiftly and the champions supported the measures put in place by Outbreak Control Teams.

F. <u>PPE and Respiratory Protection Equipment ("RPE")</u>

301. As with many organisations across the UK, the considerably higher levels of PPE required during the pandemic was an issue for WAST. The supply of PPE was at times challenging, particularly in relation to Versaflo respirator hoods, which staff who failed their mask fit testing needed to wear. The Trust discussed the increased provision of Versaflo units on the 29 January 2020 and subsequently took a decision to procure Versaflo respiratory powered respirators for each ambulance vehicle. The manufacturer of these products is a USA based company who diverted stocks and production slots to prioritise USA orders. The fulfilment of this order was protracted, leading the Trust to provide this equipment to staff that required them, rather than a vehicle-based approach. There were also issues with the appropriateness of certain PPE items in pre-hospital environments, such as aprons and their gauge/weight and suitability for the pre-hospital environment. The number of times staff had to be fit-tested for masks because of variance in the supply received was also one of the more significant operational issues that WAST faced during the pandemic.

Guidance and stock levels as at 01 March 2020

302. Management of PPE and RPE stock levels is undertaken locally within WAST, with stocks held within station running stores and larger stores at locality offices. This is

overseen by operations managers and locality administrators. There is no central inventory management system in WAST and consequently the stock levels of RPE and PPE in the Trust in March cannot be accurately determined.

- 303. In January and February 2020, WAST continued to obtain PPE via its standard routes and procedures; largely by procuring via the online procurement system 'Oracle', which is managed by NWSSP Procurement on behalf of all the NHS Wales organisations. This required requisitions to be raised at a local operational level. Requisitions are converted to purchase orders by the NWSSP team, who then send these orders to the relevant suppliers. Suppliers will then deliver, primarily to locality offices.
- 304. As of the start of March 2020, all patient facing staff in WAST were issued with a personal issue PPE pouch, for dealing with patients with HCID. This enabled staff to wear 'red' level PPE. These packs were replenished by stock held on vehicles and by local running stores in around 80 or so operational stations.
- 305. Aside from a small regional store at Hensol serving the then South East region, there were no central stores of PPE or RPE within WAST. At an NHS Wales level, stocks of RPE and PPE, including pandemic stock were held by NWSSP, primarily at the National Distribution Centre at IP5 in Newport. There was no central inventory management system in March 2020 for consumables, RPE or PPE, therefore data on the level of stock Trust wide is not available.
- 306. Following the implementation of the WAST PIP on 04 March 2020, the first meeting of the Logistics Cell took place on 06 March 2020. PPE and RPE was considered in some detail, and I exhibit the minutes of that meeting at **Exhibit JK/154 (INQ000373350)**.
- 307. In short, two issues were discussed. Firstly, WAST inadequate stocks of PPE and RPE, particularly FFP3 face masks due to the significantly increased run rate, and Versaflo respiratory hoods, required for staff who had either failed fit testing or had yet to be tested. In addition to the insufficient number of masks at the outset of the pandemic, we also encountered an additional problem in that the UK national pandemic stock of FFP3 masks needed to be revalidated, to make sure they still provided adequate protection, as they had exceeded their original expiry date. However, the minutes show that WAST had just taken receipt of alternative masks. These masks were not WAST existing stock

but the National pandemic stockpile of FFP3 masks. Revalidation of expired masks was undertaken at a UK level.

- 308. The second issue, however, was fit testing. A significant number of EMS staff had failed their fit-test and needed an alternative, originally for WAST the Versaflo hood. The problem with the new masks WAST was receiving was that they were different models. As such, staff needed to be fit-tested repeatedly. As the above minutes recorded, the situation had gone *"from a mask issue to a fit testing issue"*. Versaflo hoods were in short supply, and the Logistics Cell issued a CRIP to the EPT for their meeting on 11 March 2020 to escalate the issue of the lack of Versaflo hoods and to request access to the NWSSP emergency stock of PPE and RPE to cover the shortfall.
- 309. A further issue with WAST's stock of PPE and RPE at the start of the pandemic was that, prior to Covid, WAST had not used Type IIR face masks, which became required by national guidance, and which WAST adopted on 15 March 2020 (Exhibit JK/155 (INQ000373351)). WAST therefore had to procure Type IIR masks and withdraw the Type I and Type II masks that had previously been provided to staff. The Logistics Cell issued a CRIP to the EPT on 19 March 2020 asking that a request be made to NWSSP for the further release of national emergency stock of Type IIR masks, as WAST's residual stock was down to *"a few hundred"* (Exhibit JK/156 (INQ000373352). WAST then took receipt of 90,000 Type IIR masks on 20 March 2020 (Exhibit JK/157 (INQ000373353).
- 310. Drawing the above together, one of the lessons identified from the pandemic (discussed further below) was the importance of maintaining a store of pandemic PPE and RPE as standard. In September 2020, the WAST EPT formally approved the creation of the WAST clinical logistics hub. This included the holding of resilience stock of Covid PPE for a 12 week period (based on the height of the first wave). The holding of resilience stock within WAST was to mitigate any future supply chain issues in relation to PPE that NWSSP would possibly experience. This was included as a recommendation in WAST's "Structured Debrief Report" dated March and April 2021, following the second wave, which have already been exhibited and mirrored in the EPT's "Covid-19 Interim Response Evaluation (Wave 2)" which is exhibited at **Exhibit JK/53 (INQ000373120)**.

Guidance and supply of PPE and RPE during the relevant period

- 311. As stated above, at WAST's request the Welsh Government approved the release of pandemic PPE stock held by NWSSP. Thereafter, the supply of PPE and RPE essentially became centralised by the Welsh Government and NWSSP. Within WAST, the supply of PPE and RPE was the responsibility of the Logistics Cell. The Logistics Cell would provide information and make recommendations on PPE and RPE to SPT/TPT with subsequent recommendations to EPT, who would then make requests of NWSSP. In the early stages of the pandemic, NWSSP essentially provided PPE to the Health Boards and NHS Trusts on a pro rata basis when it was available (termed a 'push' delivery system). As supplies improved, NWSSP dealt with requests on a case-by-case basis (a 'pull' delivery system). From around April 2022, PPE and RPE procurement had returned to business-as-usual, with PPE and RPE being procured through the Oracle online procurement system. WAST's Clinical Logistics Hub continued to provide WAST specific RPE (Versaflo and Corpro).
- 312. Although PPE and RPE was generally supplied centrally by NWSSP, there were some items which WAST procured independently to provide an enhanced level of protection to frontline staff. For example, WAST determined that the gowns and standard gauge aprons supplied were not suitable for the environment staff generally worked in. They were too light and flimsy and so would get caught in the wind and blow around when worn outside (as recognised in WAST's IPC FAQ document dated 16 April 2020, exhibited as **Exhibit JK/158 (INQ000373354)**. As such, we made the decision that coveralls should be provided to staff instead, however, the number of these that WAST was able to obtain from its usual supplier through NWSSP was limited and so the Logistics Cell sourced them in partnership with several suppliers and other services. This included a bulk order of coveralls from the WAST incumbent uniform supplier who was able to redirect production capacity.
- 313. In addition, there were also some supply issues which resulted in WAST taking independent steps to try and overcome them. One of the most significant supply issues was in relation to Versaflo powered respirator hoods, which staff who failed FFP3 fittesting were required to wear (for example of the discussions around this issue, see WAST's IPC FAQ dated 16 April 2020, exhibited at Exhibit JK/158 (INQ000373354), and the Covid-19 Update dated 21 May 2020, exhibited at Exhibit JK/159 (INQ000373355). To mitigate this, and the logistical and operational strain caused by multiple models of FFP3 masks being received, the EPT decided on 28 September 2020

to switch to a half-face mask solution by a provider called Corpro. This reduced reliance on Versaflo hoods and single use FFP3 masks, as well reducing the amount of fit testing required. Provision of the Corpro mask continued throughout the pandemic. Whilst the Corpro masks were not tested with the Trust prior to procurement, they were already in use in Betsi Cadwaladr University Health Board and were therefore on the Procurement Framework which is managed by NWSSP.

- 314. Similarly, in the first few months of the pandemic, visors were in short supply and WAST appealed via social media for donations from companies and the public. Some limited use of donated PPE was approved prior to central supplies becoming more robust. This included supplies of hand gel which was checked against UK specifications and visor donations which were risk assessed by the Central and West LPT. There were some variations in the type of visors donated until production at the Royal Mint started to manufacture them. WAST also participated in a national network of ambulance services, in which a messaging forum was utilised to improve mutual aid. An example was the exchange of FFP3 masks with West Midlands Ambulance Service; WAST provided 2,640 masks to WMAS in exchange for 3,180 masks that WAST staff had already been fit tested with.
- 315. WAST also took its own view on some issues and ensured that all its guidance was relevant for staff as opposed to being generic amongst the healthcare sector. For example, on 07 April 2020, we published a revised guidance for the use of PPE and RPE (**Exhibit JK/160 (INQ000373356)**). In this, we provided that we were going to *"support and adopt"* the guidance on PPE and RPE recently issued by PHE. However, we also acknowledged that the environments staff worked in were different to other NHS colleagues in that they were *"unpredictable and uncontrolled"*. As such, we assured staff that we would support them in deciding to use additional or higher level PPE and RPE to that outlined in the guidance, if they decided that any particular situation warranted it. My understanding is that this put us at variance with the rest of the UK, but in my view it was the right decision as it provided for our people to further enhance the level of PPE they used should their dynamic risk assessment indicate it was necessary. My impression was that this decision made staff feel supported and that we were trying to make them as safe as we could. In doing so, we were mindful not just of the needs of staff, but also of the PPE and RPE supply issues that Wales, the UK, and other

countries, were facing during the specified period. Accordingly, we reminded staff of the need to not be wasteful.

- 316. Similarly, after the Welsh Government withdrew the requirement for PPE and RPE to be worn in health and social care settings, the EPT decided to continue to direct staff that level 2 PPE and RPE be worn in clinical settings. This was to ensure the continued safety of patients and staff during the transition from the pandemic into business as usual 'new normal' beyond the specified period.
- 317. WAST also aimed to help staff and volunteers by trying to make PPE and RPE requirements as clear as possible, particularly in the uncertain and fast-changing context of the early stages of the pandemic. For example, on 17 March 2020, we issued a 'pocket guide' for staff on PPE and RPE requirements and vehicle decontamination (Exhibit JK/161 (INQ000373357)).
- 318. As highlighted above, one major issue which WAST encountered, which had a significant impact on capacity, was fit testing. In simple terms, the performance of and protection afforded by PPE face masks depends largely on the contact between the wearer's skin and the seal of the mask. A poor fit means less protection for the wearer. Thus, the fit of masks needed to be tested to ensure adequate protection was being provided. We published a Fit Testing SOP for the provision of respiratory protection equipment in January 2021, which was updated and amended thereafter (Exhibit JK/162.01–- JK/162.04 (INQ00037358 INQ000373361)).
- 319. In March 2020, WAST also ran a campaign appealing to staff to be clean shaven ("Reach for The Razor"), as this was the reason that some colleagues were failing their fit testing, recognising that not everyone was able to participate because of, for example, religious reasons. Colleagues for whom shaving their facial hair was deemed not appropriate were able to discuss different options with their line manager and some staff were offered a Versaflo respirator hood as an alternative. This was a campaign in which the executive leadership participated.
- 320. One specific issue where there was some inconsistency between different organisations was on the question of whether or not certain procedures were AGPs. The two

procedures around which there was some debate for ambulance services were nebulisation and CPR.

- a. Nebulisation is the process by which a drug delivery device is used to administer medication in the form of a mist, which is inhaled by the patient. In April 2020, the National Ambulance Service Medical Directors ("NASMeD"), part of AACE, published guidance which provided that nebulisation is not an AGP (Exhibit JK/163 (INQ000373362)).
- b. As to CPR, in April 2020, the New and Emerging Respiratory Virus Threats Advisory Group ("NERVTAG") published its *"consensus statement on Cardiopulmonary Resuscitation (CPR) as an AGP"* and concluded that chest compressions and defibrillation were not AGPs. PHE subsequently issued guidance based on NERVTAG's statement. Later, the AACE also issued a position statement on AGPs in July 2022, which did not include nebulisation and CPR on the list of procedures considered to be AGPs (Exhibit JK/164 (INQ000281179)).
- 321. The practical consequence of the above was that the guidance recommended a lower level of PPE (level 2) than would have been the case if these procedures had been determined to be AGPs, though did provide that healthcare organisations could opt for AGP levels of PPE if they considered it appropriate. However, whilst NASMeD and NERVTAG had not categorised nebulisation and CPR as AGPs, other bodies had (most notably the Resuscitation Council UK (**Exhibit JK/165 (INQ000251651)**). On top of this, the concern held by WAST was that some of the NASMeD, NERVTAG and PHE guidance was internally inconsistent. For instance, NASMeD advised ambulance crews to stand upwind of patients being nebulised, open the windows and ensure that ambulance ventilation settings were not set to recirculate. Similarly, PHE advice following NERVTAG's consensus statement referred to the Resuscitation Council Guidance UK which stated that when PPE is not available a towel should be placed over a patient's mouth before commencing chest compressions. These actions would logically be unnecessary if these procedures were not AGPs.
- 322. Without wanting to add to any inconsistency of approach or messaging, we did not formally reject the guidance provided. However, we issued WAST's own enhanced

guidance which provided that level 3 PPE must be worn for nebulisation and for any patient under cardiac arrest on the basis that a patient in this condition may require other procedures which would be considered to be AGPs and so donning level 3 PPE at the outset would avoid any risk of delay down the line (**Exhibit JK/166 (INQ000373365)**). That way, WAST were able to formally adopt the guidance, but mitigate any potentially adverse consequences by advising staff to wear enhanced PPE above that which the guidance suggested. In effect, it was WAST's view that, regardless of whether nebulisation or CPR were deemed to be AGPs, they were procedures which were often going to be performed as part of ongoing clinical treatment where other AGPs might well be carried out. As such, WAST felt that the safest option both for staff in terms of PPE, and for patients in terms of the avoidance of delay, was for level 3 PPE to be worn at the outset when there was the potential for these procedures to be performed.

323. WAST's guidance also confirmed the approach to be taken in circumstances where a patient goes into cardiac arrest unexpectedly and where level 3 PPE had not already been donned. In this instance, on the basis that defibrillation alone would not be an AGP, the advice was that one staff member withdraw and don level 3 PPE whilst the other apply the defibrillator and deploy a maximum of three shocks, before then also withdrawing to don level 3 PPE. This was confirmed to still be the guidance in a Joint Partnership Notice dated 19 February 2021 (**Exhibit JK/167 (INQ000373366)**). Chest compressions could commence once staff were donned in level 3 PPE.

The adequacy of the PPE and RPE provided to ambulance healthcare staff

- 324. As stated above, decisions regarding the provision and choice of PPE/RPE was predominantly for others notwithstanding that in a limited respect WAST sourced more suitable PPE and RPE for staff and volunteers.
- 325. One key way in which WAST monitored the suitability and provision of PPE and RPE was via the adverse incident and 'near miss' reporting software 'Datix'. This informed WAST about staff experiences where PPE and RPE issues had been encountered. WAST also looked for notifications from NHS Wales Procurement on potential issues experienced across Wales NHS staff and monitored feedback from its staff and Trade Union partners. In this way, issues with PPE and RPE were identified as promptly as possible. For example, on 19 May 2020, we published an update to staff to inform them of a small number of adverse incidents that had been reported in relation to sensitivity

reactions of a particular type of mask (DSBJ Type IIR face mask). It was identified that the issue was with one particular batch and WAST withdrew that batch immediately as a precaution. Subsequent testing by the Surgical Materials Testing Laboratory found that there were no issues identified with the mask (**Exhibit JK/168.01 – JK/168.02** (**INQ000373367 – INQ000373368**)).

G. Lessons Identified and Future Risks

- 326. WAST undertook structured debriefs after each wave of the pandemic, and a final debrief in November 2022 in which WAST reflected as an organisation on the pandemic in its entirety. These Structured Debrief Reports have already been exhibited elsewhere in this statement. These repeated debriefs enabled WAST to identify and implement key lessons and recommendations as it went through the pandemic and to make changes accordingly. As noted above, adjustments were made to the Pandemic Plan as a result of these debriefs as well as to other aspects of WAST's pandemic response.
- 327. WAST also undertook surveys, such as the June 2020 "Have Your Say" exercise referred to in this statement above, to capture feedback from WAST staff and to make changes accordingly.

What worked well

- 328. In my opinion, the following were some of the key aspects of WAST's pandemic response which I believe worked well:
 - a. The approach WAST took to reflect on and learn from each wave of the pandemic is something that went well. WAST's attitude of seeking to identify aspects of the response that was working, challenges we were facing and opportunities to improve stood us in good stead and we can demonstrate how we implemented those lessons as we went along. For instance, the way we worked during the pandemic has been embedded into the 'business as usual' documentation, with directorates and teams now working markedly more collaboratively than they did before the pandemic.
 - b. The early triggering of the PIP, before the WHO had declared the Covid outbreak a pandemic, meant that WAST had a structure in place early on which enabled us to take decisive action in response to the developing pandemic.

- c. I am proud of the way WAST looked after its people, in a pandemic of this magnitude where staff and volunteers were inevitably going to be put at significant risk, looking after them and making them feel as safe as possible. For instance, going beyond public health advice and enabling staff to don level 3 PPE made staff feel safer and enabled them to attend to patient needs without wasting time with putting on higher level PPE. Likewise, the way WAST communicated with its staff, for example through direct and electronic communication, reassured them that the Trust was taking this seriously, that colleagues' health and safety was paramount and that they had full support.
- d. The autonomy and agility that devolution and the way healthcare is structured in Wales provided WAST with the ability to improve the protection provided to its staff and to patients. To a large extent, WAST could make its own decisions about how to respond to, monitor, and recover from the pandemic. An example of this was the implementation of Protocol 36 and the flexible way in which WAST altered its dispatch priorities by moving up and down the levels of the Protocol in response to demand, pressure and the general pandemic situation at any given time. In saying this, WAST was not significantly divergent from England, but there were periods of difference, mainly on de-escalation. Again, as I mentioned above - this is a comparative statement. As a single ambulance provider, across the country, in a health economy with its distinct arrangements, in comparison to ambulance Trusts in England, WAST had greater freedom to act, which was largely in the interests of its personnel and the population it serves.
- e. The approach WAST took to modelling was of great assistance to help plan for the different waves of the pandemic as well as ensuring the continuity of EMS and other services for non-Covid related care. With national modelling focussing on hospital admissions and capacity, WAST developed its own approach which provided for data-driven responses and enabled it to be on the front foot when planning.

- f. WAST collaborated with other organisations and bodies. In particular, the assistance received from the Military and Fire and Rescue Services ("FRS") enabled us to expand capacity significantly. Whilst some staff raised concerns about working with non-clinically trained individuals, particularly in the third wave of the pandemic, there were no adverse incidents caused by this arrangement and capacity to respond was improved. As to the way WAST staff worked with non-clinically trained personnel, see the OPRU SOP exhibited at Exhibit JK/50 (Exhibit JK/50 (INQ000373097 INQ000373098; INQ000373100 INQ000373101; INQ000373104 INQ000373109)) and non-clinical support issue-escalation guidance (Exhibit JK/169.01 JK/169.03 (INQ000373369 INQ000373371) dated January 2022.
- g. WAST's technological adaptations such as providing iPads and laptops to staff, switching to delivering training remotely and the rollout of Microsoft 365 at pace alongside the response in the early stages of the pandemic all worked well.

Difficulties and challenges

- 329. I have listed some of the difficulties WAST faced below. Some challenges WAST was able to respond to and make changes accordingly. Others derived from broader challenges that were less within WAST's control.
 - a. Patient handover delays at hospital emergency departments became a significant challenge. Handover delays are not unique to the pandemic, but the pandemic did significantly exacerbate an existing problem. These delays had a negative impact on capacity, our ability to respond to patients in our communities, as well as on staff morale and well-being. WAST took steps to mitigate this. However, this is a system wide challenge across health and social care that is largely outside the control of WAST and continues to deal with more capacity than WAST could fully mitigate.
 - Hospital handover delays remain WAST's single biggest challenge, being one of our highest scoring corporate risks since 2019. Levels of handover delays have deteriorated significantly since the point at which the Health Inspectorate Wales ("HIW") report (Exhibit JK/183.01 JK/183.02 (INQ000410465 INQ000410466)) was produced, with in excess of 20,000 hours currently lost

each month (Exhibit JK/184.01 – JK/184.03 (INQ000410467 and INQ410469 – INQ000410470). That said, much of the findings within the HIW report remain relevant to 2024 handover delays. Whilst we haven't specifically followed up on staff understanding of who has clinical responsibility for the patient whilst waiting at ED, WAST has implemented a significant number of mitigation measures, including but not limited to, immediate release directives, clinical guidelines for the deterioration of patients awaiting handover, pathways to bypass EDs and Same Day Emergency care pathways.

- b. As to the impact on staff, WAST took some of the targeted steps set out in the staffing section above, but that did not alleviate all the concerns expressed by staff or indeed the staff issues which the pandemic caused. This was captured within the debrief reports. There were standing items in the HSWBC for both Occupational Health and Wellbeing to ensure regular review and feedback to ensure staff support was adequate. The standing items facilitated a feedback loop given the composition of group members so the regular review and feedback was carried out in the meetings and once the cell structure was discontinued this function reverted to pre pandemic avenues such as the health and safety committee, partnership meetings and staff networks. This work is continuous. There have been three large surveys since the pandemic which include feedback on staff support, a study in conjunction with Swansea University; the listening exercise during the refresh of the trust behaviours and as part of the NHS Staff Survey.
 - i. A clinical notice was published to support staff with the escalation of concerns with patients who maybe deteriorating during a handover delay (Exhibit JK/185.01 – JK/185.02 (INQ000410471 – INQ000410472). As well as the actions contained in the plan two corporate risk on handover of care outside emergency units and the inability to reach patients in the community have also been raised which detail the service delivery, staff and patient risks in relation to handover delays. Despite mitigations there two risks remain at the highest level of risk (25-almost certain and catastrophic).
- c. We had difficulties with PPE and fit testing. As set out above, PPE was provided centrally and so we only had limited control. Of course, PPE and RPE supply was a

broader issue that organisations across the UK were struggling with. Nonetheless, it was a challenge for WAST, particularly early in the pandemic before supplies improved. The additional specific challenges for us were the suitability of some of the PPE and RPE we were provided with for pre-hospital settings, for example lightweight aprons and the operational challenge of repeated fit testing. The clinical area within an EMS vehicle is extremely limited, designed for emergency care and transport to a secondary facility. Long periods of time waiting to handover in high levels of PPE in a confined area is difficult to manage, even more so in extremes of temperature. This added to the complexity of providing care to patients during long periods of delays.

d. Finally, the enhanced decontamination of ambulances for IPC purposes posed a particular challenge in terms of capacity. This is one of the difficulties that WAST was able to address by utilising more efficient methods of decontamination such as Ultrasonic Atomisation.

Innovation Identified

330. There are three innovations to highlight in particular:

a. First and foremost, the Ultrasonic Atomisation service provided by Hygiene Pro Clean, for which WAST received a St David Award for Innovation, Science and Technology in 2021. COVID-19 generated, on average, an extra 40 vehicles per week that required a Level 3 AGP clean, with the largest number seen at the depot in Tredegar. In one day as many as nine extra EMS vehicles requiring cleaning. Prior to the use of the rapid sanitisation procedure each vehicle would take up to three hours to clean not including the required 60 min stand down time (as agreed with PHW) and later reduced to ten minutes as more was known about the virus itself). Cleaning these vehicles required the Make Ready Department (MRD) staff to wear full levels of PPE which included full respiratory protection. So not only did the rapid sanitisation process reduce the cleaning times to less than 60 minutes, the health benefit to the MRD staff was that there was less time spent wearing this high level of PPE. The final added benefit was in the full knowledge that vehicles were cleaned to a high standard with a proven product effective at killing the COVID-19 virus.

- b. Secondly, the use of Protocol 36 was innovative. The flexible and responsive way in which we moved up and down the levels provided for the effective and efficient prioritisation of patients.
- c. Thirdly, as part of Protocol 36, WAST introduced broader call screening with enhanced scripts for EMDs. Before this point, the EIDS tool was limited in that it was only utilised on protocols which were related to Covid symptoms and only asked about the patient. This led to false negative EIDS screening in circumstances where the patient's chief complaint was not Covid related, for example they had fallen, or where even though the patient was not symptomatic members of their household were. On such occasions, ambulance crews would accordingly not have appropriate PPE. Similarly, there were callers who were anxious about crews attending their property because they were elderly or high risk and so were shielding to protect their health and there was no consistent process for recording this information.
- d. The enhanced scripts WAST introduced provided drop-down boxes for recording information to share with responding crews. The scripts were directed at all occupants at the property and used for all calls not just those specifically related to Covid symptoms. They were further developed to allow the recording of patients who were shielding, so that crews could take additional precautions to prevent the spread of infection. This enhanced screening remained in place throughout the pandemic response until December 2022, regardless of whether EIDS or Protocol 36 was in operation. EMD scripting associated with this enhanced screening also instructed residents other than the patient to move to another room away from the patient (if they were symptomatic, self-isolating or confirmed positive) to protect patient and crew safety.

Learning/recommendations for the future

- 331. As an organisation, WAST identified several key lessons and recommendations for responding to future outbreaks and pandemics. These were as follows:
 - a. Firstly, a lesson borne out of the redeployment and allocation of staff was to understand what skills and knowledge was available across the organisation to enable any future allocation. To support this, the Assistant Director Leadership

Team ("ADLT") developed a Microsoft SMS Form that all staff should complete outlining their skills, knowledge, and experience. This data is kept at a local level.

- b. Secondly, in relation to the PPE and RPE challenges identified above, it was recommended that WAST maintain a stock of appropriate pandemic PPE. Moreover, in terms of the challenge of fit testing, it was recommended to fit test all front-line staff on joining the organisation and have a programme of proportionate ongoing testing in place.
- c. Thirdly, the impact of frontline staff working with non-clinical staff (FRS and Military) during each wave of the pandemic was being felt both in industrial relations with Trade Unions and in staff fatigue. FRS and Military staff were not clinically trained, and this placed staff under more pressure than would otherwise have been the case. The appropriate recommendation and the subsequent response is being considered.
- 332. The phrase 'unprecedented' has become rather cliched in recent years, but the pandemic was a period of unseen challenges, of sadness and tragedy, but also of great human resilience and commitment. In this context, 'unprecedented' is the only accurate word to describe our experience of the Covid-19 pandemic. Throughout the course of the pandemic, staff and volunteers continued to provide excellent care to patients at a time of fear, anxiety and considerable change in how we delivered our services. Everyone in the organisation demonstrated a continued commitment to our communities as well as to their colleagues. Personnel often worked over and above what we routinely expect from them, and at times when there was little known about the virus and the evolving situation. Our people worked selflessly and potentially placed themselves, their families and loved ones at risk to continue to provide compassionate, safe and effective care to patients. I am immensely proud of and grateful to all of our people for their dedication to public service during such unprecedented times.

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.



Dated: 6th June 2024