



**NHS**

**London Ambulance Service**  
NHS Trust



# Annual Quality Account

2022/2023

## **Introduction**

This quality account provides a report on the quality of our services and the improvements we are making in relation to patient safety, the effectiveness of care and responding to patient feedback about the care we provide. Part 1 contains a statement on quality and a statement on Directors' responsibilities in relation to quality. Part 2 reports on our progress over the 2022/23 financial year and outlines our priorities for improvement in 2023/24. Part 3 provides statements in relation to our quality infrastructure and statements from our stakeholders, including our Patient and Public and Council and Commissioners.

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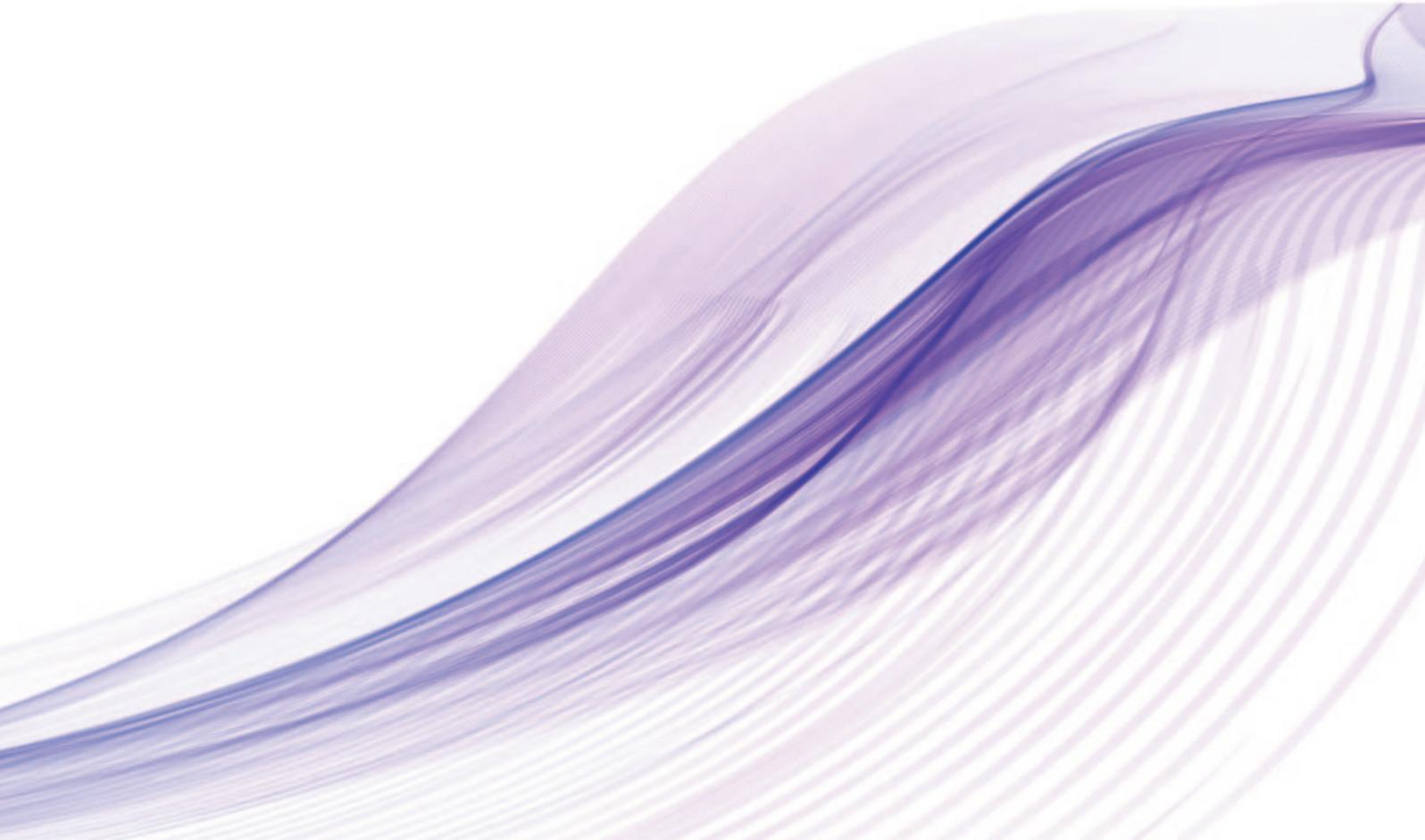
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## Part 1:

# Foreword and Statement on Quality

Welcome to the London Ambulance Service (LAS) Quality Account for 2022/2023 which provides a review of the quality priorities for the year along with a review of other key services that support the provision of high-quality care and outlines the quality priorities we have set ourselves for 2023/24. Our ambition is to provide patients with the highest quality of care by striving to ensure they receive the right care, in the right place, and at the right time. We provide 999 call handling, hear and treat and ambulance services across London, as well as 111 call handling services in four out of five ICS areas and integrated urgent care clinical assessment services in North East and South East London.

The past year has seen sustained high levels of demand which has resulted in both the 111 and 999 services needing to operate differently in order to maintain safety of care provision to our patients. We worked collaboratively with partner providers to implement several initiatives to make sure we got to people who needed us as quickly as possible, for example introducing 'cohorting' at hospitals to free up ambulances to respond to patients waiting in the community, being one of the two sites for the NHS England Category 2 segmentation pilot, which sees our clinicians assessing appropriate calls to ensure those who are in most need receive the fastest response, and designing and implementing a joint Urgent Community Response service. However, we recognise that during periods of sustained pressure some of our patients waited longer than the national standards for a response, particularly those with non-life-threatening conditions.

Last year, we set 3 themed quality priorities with 12 supporting objectives and associated Key Performance Indicators (KPIs). These priorities were identified from the feedback from our stakeholders, staff and manager engagement as well as internal sources of quality intelligence. We made good progress on many of the plans that we set out to achieve, but the challenges of sustained high demand meant that we weren't able to achieve everything we set out to. Our progress against all priorities is detailed in the 'looking back' section of this report.

Looking forward to 2023/24 we have developed 5 priorities on which we will focus our improvement efforts: cardiac arrest management, care after a fall, hear and treat consultations, reducing delays and infection, prevention and control.

In recognising the progress we have made during the last financial year, we would like to take this opportunity to publicly thank all our staff, volunteers, partner agencies and system wide partners, who have and continue to work incredibly hard in delivering high quality emergency and urgent care to the people of London during another difficult year.



**Daniel Elkeles**  
Chief Executive



**Dr John Martin**  
Chief Paramedic & Quality Officer

	<b>Patient Care – Overview</b>	<b>Status</b>
1	Improve care for patients presenting with out of hospital cardiac arrest and / or ST-Elevation Myocardial Infarction	<b>Partial</b>
2	Improve the identification and referral of unrecognised hypertension responding to the rise in incidents of cardiovascular disease and stroke and linking with CORE20PLUS5	<b>Complete</b>
3	Develop a Health Inequalities Action Plan	<b>Partial</b>
4	Improve our compliance with infection prevention and control measures	<b>Complete</b>

	<b>Patient, Family &amp; Carer – Overview</b>	<b>Status</b>
5	Deliver the Right Care, Right Now Programme	<b>Partial</b>
6	Improve how the Trust triangulates and shares learning from incidents, complaints, claims and excellence.	<b>Complete</b>
7	Improve against response and call answering/ call-back indicators, reducing avoidable harm and poor experience due to delays	<b>Partial</b>

	<b>Staff engagement and support - Overview</b>	<b>Status</b>
8	Improve access to clinical supervision for all clinicians to improve access to clinical development and progression	<b>Complete</b>
9	Improve access to specialist/ advanced practice opportunities and rotational working	<b>Complete</b>
10	Improve the percentage of staff who feel able to make improvements in their area of work	<b>Partial</b>
11	QI projects responding to patient's needs by sector	<b>Complete</b>
12	Back to basics: kit and equipment	<b>Partial</b>

## Statement of Directors' Responsibilities

The directors are required under the Health Act 2009 and the National Health Service (Quality Accounts) Regulations to prepare Quality Accounts for each financial year. NHSE has issued guidance to NHS trust boards on the form and content of annual quality accounts (which incorporates the above legal requirements) and the arrangements that NHS trust boards should put in place to support the data quality for the preparation of the quality account. The London Ambulance Service has prepared the annual quality account in line with this guidance ensuring directors have taken steps to satisfy themselves that:

- The content of the Quality Account meets the requirements set out in the Quality Accounts requirements 2022/23 and supporting guidance
- The content of the Quality Account is not inconsistent with internal and external sources of information including:
  - Board minutes and papers for the period April 2022 to March 2023
  - Papers relating to quality reported to the board over the period April 2022 – March 2023
  - Feedback from commissioners dated 23<sup>rd</sup> May 2023
  - The national staff survey
- The quality report presents a balanced picture of the NHS trust's performance over the period covered
- The performance information reported in the quality report is reliable and accurate
- There are proper internal controls over the collection and reporting of the measures of performance included in the quality report, and these controls are subject to review to confirm that they are working effectively in practice
- The data underpinning the measures of performance reported in the quality report is robust and reliable, conforms to specified data quality standards and prescribed definitions, is subject to appropriate scrutiny and review and The Directors confirm to the best of their knowledge and belief they have complied with the above requirements in preparing the quality report.

By order of the Board



Andrew Trotter OBE QPM, Chair



Daniel Elkeles, Chief Executive



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## Part 2: The Look Back: 2022/2023 in Review

### Report on the 2022/23 Quality Priorities

Delivering our quality priorities has remained a high priority despite the challenges which have been experienced due to the high demand across the urgent and emergency care system, on-going COVID recovery and other major events which were unexpected e.g. heat wave, industrial action and the death of HM The Queen. Throughout the year sustained focus was required to deliver safe and

effective care and deliver the priorities with a flexible and adaptable approach.

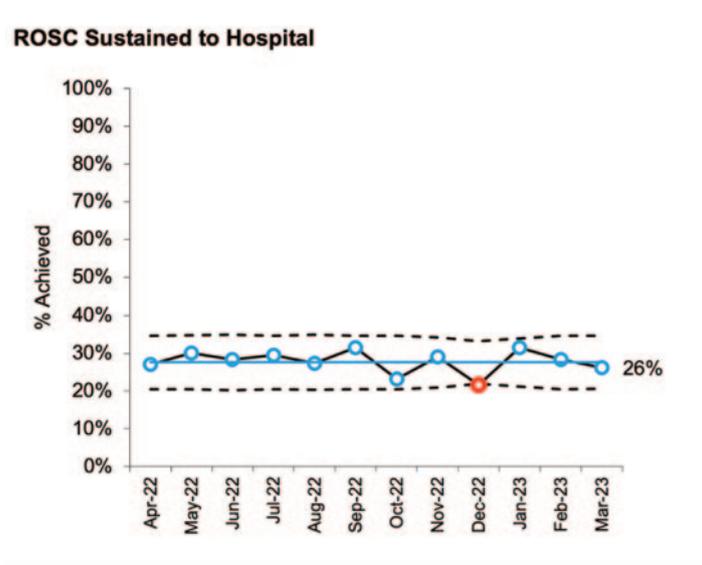
The Trust identified 3 themed quality priorities for the 2022-2023 financial year. These priorities were developed based on our business plan, feedback from our stakeholders and internal sources of quality intelligence. We made significant progress against all elements of the priorities, as outlined in detail in the following sections.

### Priority 1 – Patient Care

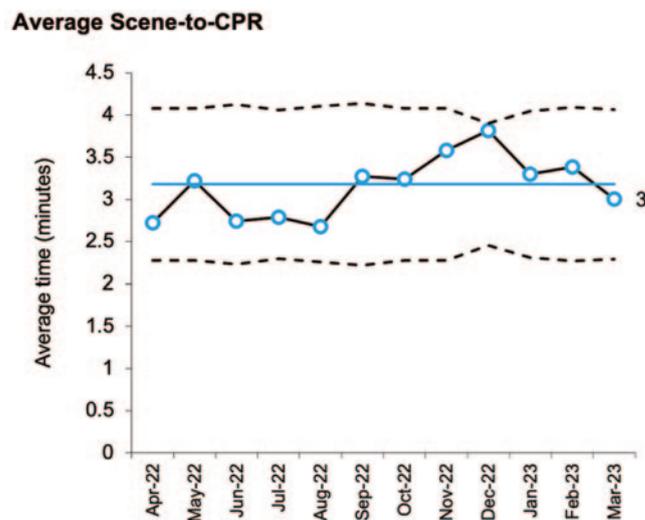
	Patient Care – Overview	Status
1	Improve care for patients presenting with out of hospital cardiac arrest and / or ST-Elevation Myocardial Infarction	●
2	Improve the identification and referral of unrecognised hypertension responding to the rise in incidents of cardiovascular disease and stroke and linking with CORE20PLUS5	●
3	Develop a Health Inequalities Action Plan	●
4	Improve our compliance with infection prevention and control measures	●

**Objective 1: Improve care for patients presenting with out of hospital cardiac arrest and/ or ST-Elevation Myocardial Infarction**

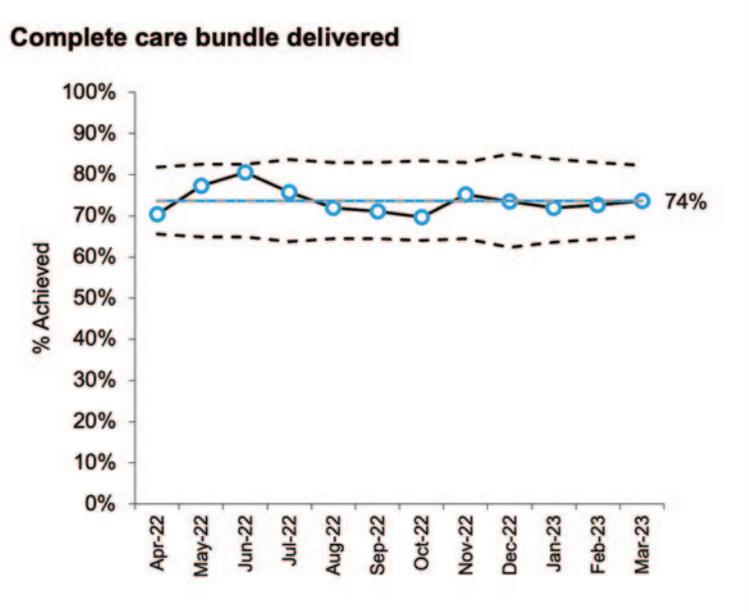
Return of Spontaneous Circulation (ROSC) rates have fluctuated since April 2022 and remain close to 30% target where data is available.



The time measured from arrival on scene to CPR being started has remained below the target of 5 minutes each month and within the statistical process control (SPC) control limits.



Delivery of the STEMI care bundle has remained consistently below the target of 80%. Further work in this area this required to improve delivery of the care bundle. Work on improving delivery of the bundle of care will continue throughout 2023/24.



## Objective 2: Improve the identification and referral of unrecognised hypertension responding to the rise in incidents of cardiovascular disease and stroke and linking with CORE20PLUS5

We developed a guideline and process for referring patients to primary care with unrecognised hypertension as part of responding to the rise in incidents of cardiovascular disease and stroke and linking with the Core20plus5 approach to reducing health inequalities. We have agreed the referral criteria, analysed historic data to predict the volume of

notifications, designed and tested the workflow and are now ready to undertake a pilot in early 2023/24. We expect that approximately 250 patients per day may benefit from referral Trust wide, equating to approximately 1.4 referrals per GP practice per week. These are patients where the finding was incidental and did not require immediate clinical intervention



### Objective 3: Develop a Health inequalities Action Plan

We agreed a CQUIN with our commissioners, and focused on three areas: improving the identification of unrecognised hypertension, improving the care of patients with sickle cell disease through early identification, optimising their treatment and conveyance/ referral decisions, and identifying health inequalities within pre-hospital maternity

care to improve clinical decision making and improved patient experience.

Ethnicity and gender identity is now routinely captured via our electronic patient care record (ePCR), as part of our work to improve use of this data, we intend to analyse 999 contacts, ambulance activity and alternative care referrals in the context of ethnicity, age and gender.

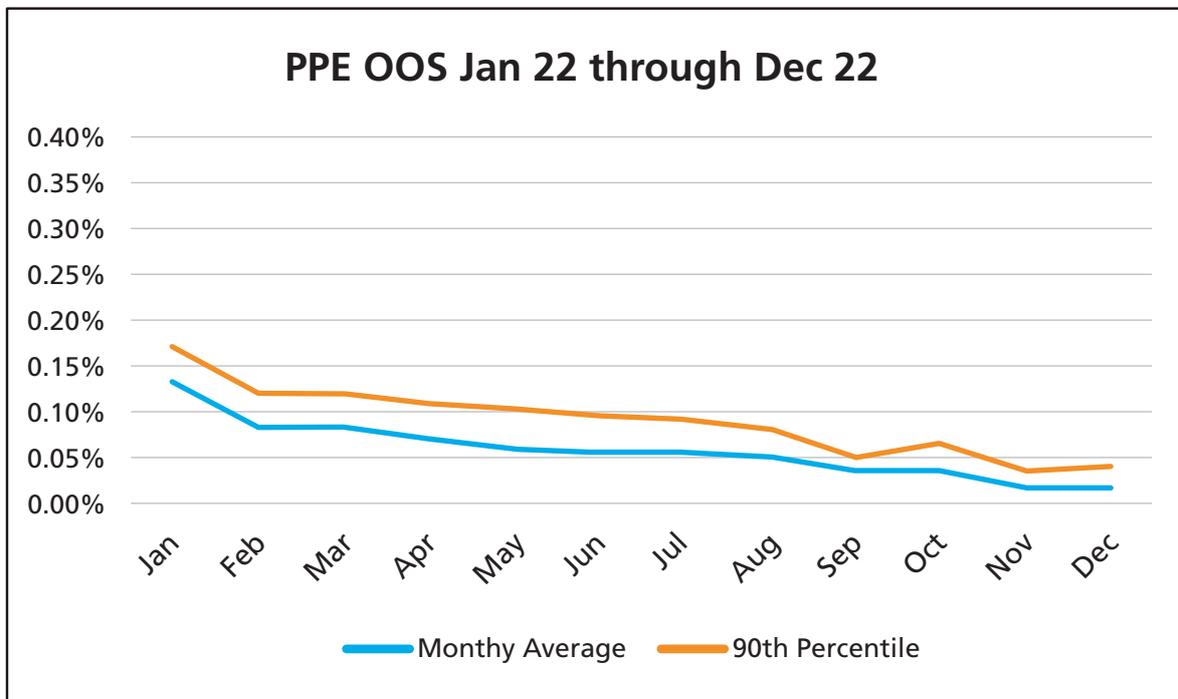
Month	% of EPCR Records with Age Completed	% of EPCR Records with Gender Completed	% of EPCR Records with Ethnicity Completed
Apr-22	95.7%	96.1%	89.4%
May-22	95.4%	95.8%	89.0%
Jun-22	94.9%	95.3%	87.7%
Jul-22	95.0%	95.5%	87.3%
Aug-22	94.9%	95.4%	87.5%
Sep-22	96.5%	96.9%	87.1%
Oct-22	99.5%	99.6%	84.4%
Nov-22	99.6%	99.6%	85.7%
Dec-22	99.7%	99.7%	86.3%
Jan-23	99.7%	99.7%	87.9%
Feb-23	99.4%	99.7%	88.7%
Mar-23	99.7%	99.8%	89.2%

To develop our action plan, we plan to recruit a public health specialist clinician with recruitment to this post commencing from April 2023. Work to develop our health inequalities action plan will continue throughout 2023/24 and forms a key objective in both our Quality priorities, business plan and 5 year strategy.

**Objective 4: Improve our compliance with infection prevention and control measures**

Following the increased use of personal protective equipment (PPE) throughout the pandemic, we set out to ensure we maintained PPE levels. As we have emerged from the national pandemic we have maintained significant focus on infection prevention and control. All of the 2022/23 work-plan actions were completed along

with new IPC guidance. A multidisciplinary IPC day was held with national and regional speakers. We have maintained our supply and distribution of PPE, improving availability of PPE at ambulance stations and adjusting guidance in lines with national guidance.



February – December 2022 improvement data by month

The improvements have been achieved by implementation of a Central Asset Management System and improving auto-replenishment of stock to Make Ready Hubs to ensure stock levels are maintained, supported by Plan, Do, Study, Act (PDSA) cycles to understand root causes.

Reinforcing the importance of exemplary hand hygiene practice continues to be communicated to colleagues as part of the IPC annual work programme. IPC Link

Practitioners (IPCLPs) continue to raise hand hygiene standards through leadership and role modelling at stations. A year-to-date review of hand hygiene submissions showed that 9 stations out of 19 met or exceed their annual target. Where audit returns are received, compliance is at a high standard. Further work will be continued into the next year to improve this further, focusing on improving audit returns as part of our priorities for 2023/24.

## Priority 2 – Patient, Family & Carer Experience

	Patient, Family & Carer – Overview	Status
5	Deliver the Right Care, Right Now Programme	
6	Improve how the Trust triangulates and shares learning from incidents, complaints, claims and excellence.	
7	Improve against response and call answering/ call-back indicators, reducing avoidable harm and poor experience due to delays	

### Objective 5: Deliver the Right Care, Right Place Programme

The ‘Right Care, Right Place’ programme has been defined and the dedicated board has been re-established following COVID. The following areas will form part of this programme:

- Same Day Emergency Care (SDEC)
- Urgent Treatment Centres (UTC)
- Urgent Community Response (UCR) cars
- Maternity
- Mental Health
- End of Life Care (EoLC)

SDEC Direct or SDEC by exclusion is now live pan-London, with a single information document now available on the mobile directory of services used by ambulance clinicians (MiDoS).

UCR cars are now operating in South West, North East and North Central London. The cars are staffed with paramedics and nurses and operate daily from 08:00-20:00, with solo paramedic staffing overnight.

The UCR teams see patients in lower triage categories and have access to a range of additional skills and diagnostics to enable patients to remain at home where they

might have otherwise travelled to hospital.

We are now the lead provider for the Mental Health Joint Response Cars (MHJRC) across London. We now have an MHJRC working in each sector and an additional car responding to patients in central London (6 in total).

All of these initiatives provide the opportunity for LAS to provide bespoke patient centred care particularly to patients from more vulnerable groups. They have been co-designed with partner healthcare providers and also provide development opportunities for clinicians.

## **Objective 6: Improve how the Trust triangulates and shares learning from incidents, complaints, claims and excellence.**

We set out to develop a virtual notice board and digital repository of learning and to develop the Trust Learning from Experience magazine, INSIGHT, to include more interactive and multimedia content.

To achieve this, we established a new intranet page which will become the central 'notice board' to share key communications around learning. A key aspect of this is using the Learning from Experience page to share learning from thematic reviews, INSIGHT Magazine and triangulated data from the Trust's Safety Investigation Assurance Learning Group (SIALG).

We have re-established the Learning from Experience approach, commenced Virtual Learning from Experience Case Events for staff to attend and discuss case reviews following Patient Safety Investigations and the associated learning and discussion points. Further learning is available from 'Learning from Incidents' posters displayed on stations and available on the intranet. We also share information via our weekly 'TV Live' broadcast, at CPD events, and clinical audit infographics.



**Objective 7: Improve against response and call answering/ call-back indicators, reducing avoidable harm and poor experience due to delays**

We set out to improve achievement of 999 call answering indicators. Unfortunately, along with ambulance trusts nationally, the increased call volume meant we saw a significant increase in our call answering mean since April 2022, peaking at 150 seconds (2mins 30 seconds) in December 2022. Following the successful opening of

our new 999 control room at Newham in June 2022 and implementation of ClericCAD in September 2022, our focus now is to continue to improve the processes and increase our establishment of emergency call handlers and despatchers. This is being done via the EOC improvement plan.



EOC Call Handler Recruitment Plan, showing the planned increase in call handlers in post and reduction in vacant posts.

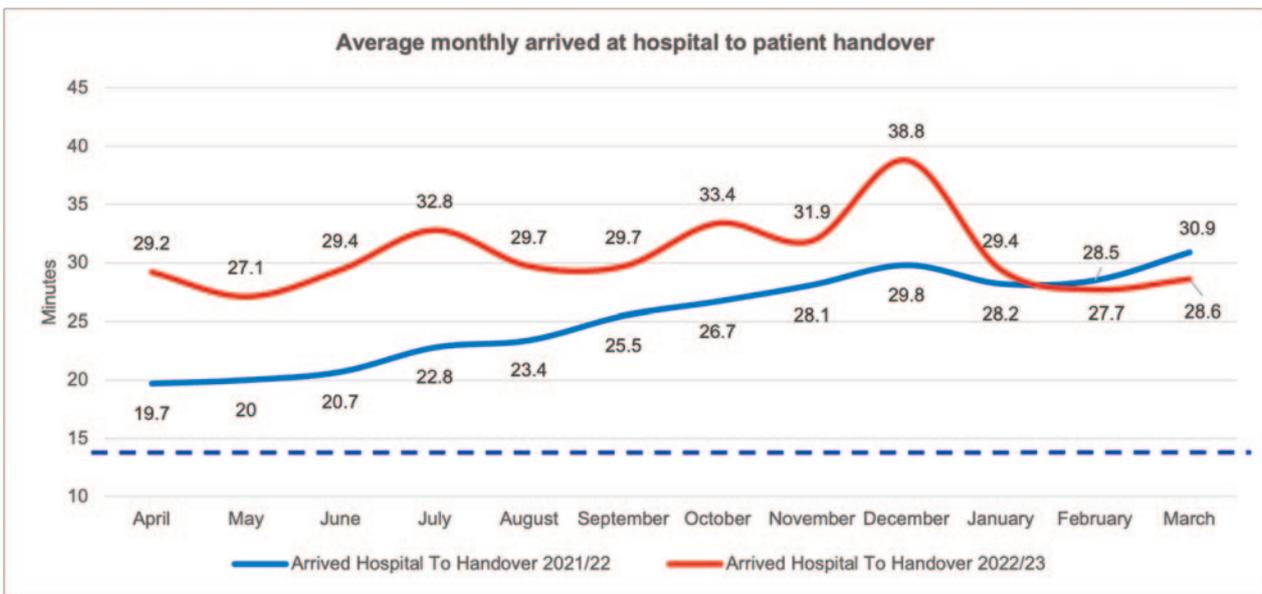
We have also introduced Welfare Text Messaging and can now send an SMS message to callers who are awaiting an ambulance dispatch. This provides reassurance that we are working to send them an ambulance along with a request not to use 999 to ask for an expected time of arrival. This has reduced incoming call volumes whilst enabling us to maintain contact with patients awaiting our attendance. We have also now launched an extensive EOC Transformation programme which includes a call handling improvement stream, which will take forward further work into 2023/24.



We have worked closely with the Metropolitan Police to refine the process for them requesting ambulance support to ensure that the sickest patients are passed via the CAD link and others are formally assessed with a validated triage system either via 999 or 111

To maximise the availability of ambulances we have worked with the ICBs and NHSE

London to reduce the time lost at hospital awaiting handover. At the beginning of 2022/23 the Trust were averaging arrival at hospital to patient handover at 30.9 minutes. The monthly averages fluctuate between 27.1 and 32.8 minutes, until the winter period where they peak at 38.8 minutes. Currently the average is 28.6 minutes.



The total hours of breaches (> 15 minutes) has increased on the previous year, however cohorting, patient flow and hospital delay escalation interventions have been successfully employed to limit the impact of delays on service delivery. Since September 2022 the total hours returned to Ambulance Operations through LAS led cohorting is over 43,000 hours. Whilst handover delays remain a significant issue, we have developed our 'Patient Flow' team, which coordinates ambulances conveyances to an ED, along with establishing and supporting pre-arranged cohorting, ambulance receiving centres (ARC) or dynamic cohorting arrangements. We have revised default 'catchment areas' for challenged EDs and improved our forecasting of conveyance demand by liaising more closely with ambulance crews at scene. We have also agreed a maximum

45 minute ambulance handover standard with all five of our ICBs, which is monitored via our tactical operations centre.

Our NHS 111 service have been working throughout the year to improve the timeliness of 111 call answering and clinical assessments being commenced. There has been ongoing recruitment of Service Advisors and Health Advisors and broadening of our clinical workforce. We have revised our rosters to ensure they meet the patient need, introduced shorter shifts, and encouraged more cover at weekends and during the evenings. We also established a resilient collaborative with Derbyshire Health United from early November 2022 until 28 February 2023, which saw Derbyshire Health United take 5000 calls weekly.

**Hear and treat statistics:**

	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Apr 22 – Mar 23	32 (0%)	10,639 (6.1%)	92,957 (53.1%)	530 (0.3%)	70,614 (40.3%)

**Consult and complete statistics:**

	NEL	SEL
Apr 22 – Mar 23	142774 (23.19%)	139827 (25.9%)



### Priority 3 - Staff engagement and support

	Staff engagement and support - Overview	Status
8	Improve access to clinical supervision for all clinicians to improve access to clinical development and progression	Complete
9	Improve access to specialist/ advanced practice opportunities and rotational working	Complete
10	Improve the percentage of staff who feel able to make improvements in their area of work	Partial
11	QI projects responding to patient’s needs by sector	Complete
12	Back to basics: kit and equipment	Partial



**Objective 8: Improve access to clinical supervision for all clinicians to improve access to clinical development and progression**

We have transitioned the Emergency Ambulance Crew (EAC) role into the nationally recognised Emergency Medical Technician (EMT) title, a move which was welcomed by staff. We have begun the Implementation of Teams Based Working. An exciting feature of this program is clinical supervisors having dedicated time with their teams to provide clinical support and guidance.

We have recruited a number of Clinical Team Managers, in order to improve managerial and supervisory support as the Trust transitions to Teams Based Working. We have also recruited four new Quality Governance and Assurance Managers, ensuring senior clinical quality support in all operational sectors, and offering progression opportunities to paramedic clinicians. We have also appointed Sector Clinical Leads in all sectors, to support staff alongside the Senior Sector Clinical Leads.

We have also recruited a number of 'first contact' clinicians, a new role which offers the opportunity to obtain further clinical qualifications and develop new clinical skills in primary care under the supervision of general practitioners.



## Objective 9: Improve access to specialist/ advanced practice opportunities and rotational working.

We have increased our complement of advanced paramedics and first contact paramedics over the course of the year following successful recruitment events, which include robust clinical selection processes.

### During 2022/23 we recruited the following additional staff:

Advanced Paramedic Practitioner-Critical Care= 4 staff (APP-CC)  
Advanced Paramedic Practitioner-Urgent Care= 15 staff (APP-UC)  
First Contact Paramedic= 3 staff (FCP)

### This brings our current totals to:

Advanced Paramedic Practitioner-Critical Care= 40 staff (37.35 WTE) (APP-CC)  
Advanced Paramedic Practitioner-Urgent Care= 56 staff (55.5 WTE) (APP-UC)  
First Contact Paramedic= 26 staff (26 WTE) (FCP).

Opportunities for secondments and part time/portfolio working have been used as retention strategies and to enhance the knowledge and experience within each

team. This is in addition to rotational working practices embedded within APP-UC and FCP.



**Objective 10: Improve the percentage of staff who feel able to make improvements in their area of work.**

Giving staff the medium and opportunity to share ideas for improvement was fundamental within this objective. We note

modest improvements in the autonomy and control reported by our staff via the NHS staff survey.

Autonomy and Control	LAS 2021 Positivity Score	LAS 2022 Positivity Score	
Always know what work responsibilities are	83.8%	85.1%	↑
Feel trusted to do my job	79.1%	79.9%	↑
Opportunities to show initiative frequently in my role	57.8%	57.9%	↑
Able to make suggestions to improve the work of my team/department	44.3%	47.0%	↑
Involved in deciding changes that affect work	21.7%	24.8%	↑
Able to make improvements happen in my area of work	26.2%	28.5%	↑

A Quality Improvement engagement mobile app was implemented at the beginning of the year, this has not been utilised as well as intended and our next steps are to focus on specific project, for example in Make Ready, EOC and areas with Team Based Working. This is in addition to local initiatives across stations and groups encouraging staff engagement on improvements, from simple conversations, idea ‘boxes’, specific email addresses, and use of social media. In 2023/24 we will establish a ‘Getting the Basics Right’ quality improvement project, responding to staff feedback on where we should focus our efforts.

promotes quality improvement, quality improvement training and various other aspects of quality governance.

We have introduced ‘Quality Bites’, a weekly information and guidance tool included in the Trust Routine Information Bulletin (RIB). This weekly news article

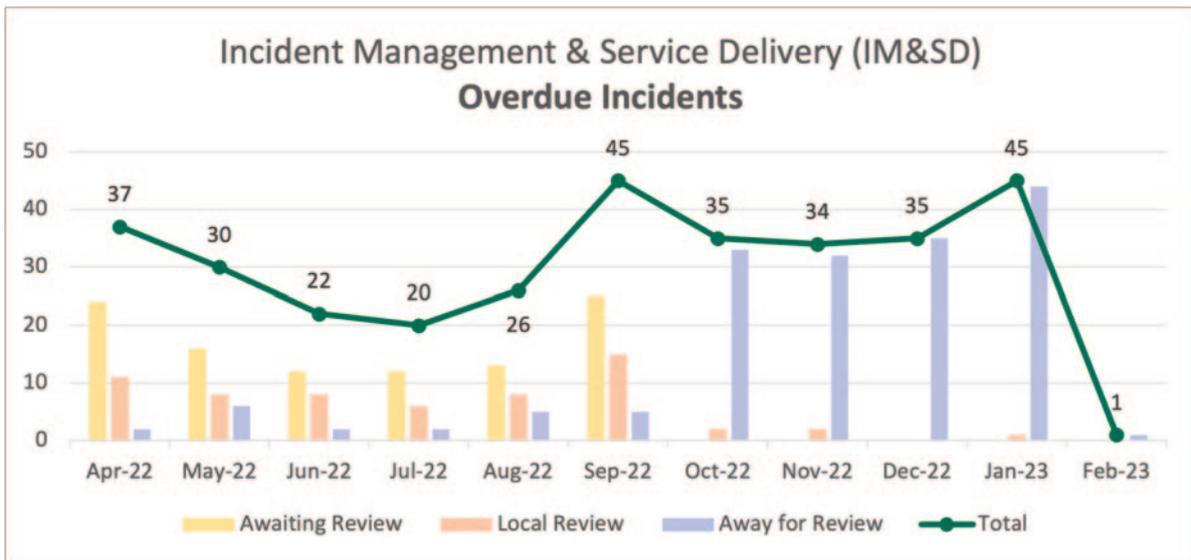
## Objective 11: QI projects responding to patients' needs by sector

We sought to implement Quality Advocates in each sector. Unfortunately due to operational pressures this remains a work in progress and the timeline for achieving this has been extended into 2023/24. It is intended that Quality Advocates will engage staff and raise awareness of quality improvement, assurance and learning; acting as a communication link between the Quality Directorate, the Sector Quality Governance & Assurance Manager, Quality Support Officer and local colleagues.

Even when the service is operating under increased demand it is important to continue to improve and learn. We sought to undertake Quality Improvement projects across the Trust during 2022/23 and are pleased to share two examples as part of this Quality Account.

**Emergency Operations Centre:** Addressing delays in investigating and progressing incident reports.

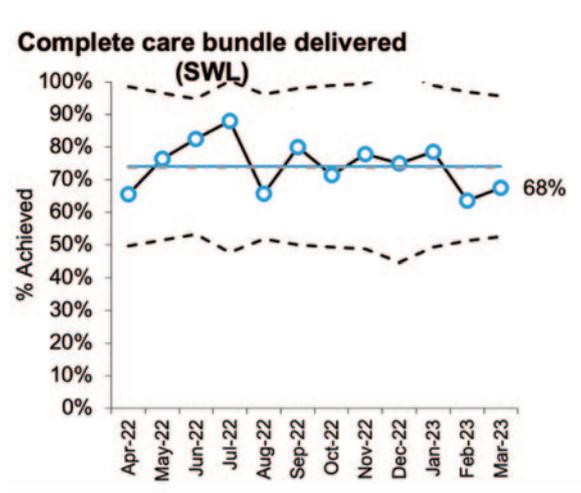
From a baseline in April 2022 of 222 overdue incidents across all 999 departments (EOC, CHub and IM&SD) there was some initial improvement as a result of increased reporting and focus at the 999 Quality Group. Due to competing priorities the rate of reduction was not sustained and following a difficult winter we saw a further spike in overdue incident investigations. Of particular note from the breakdown by department is the success IM&SD have had in reducing their overdue figure to almost zero, as a result of sustained focus with an emphasis on learning and feedback.



**South West London: Improving the STEMI Care Bundle.**

The aim of this project was to improve compliance with delivery of full STEMI care bundle which had seen below average compliance historically; and particularly to improve compliance with the provision of analgesia. A range of improvement methods were tested, including feedback to clinicians, written articles highlighting the

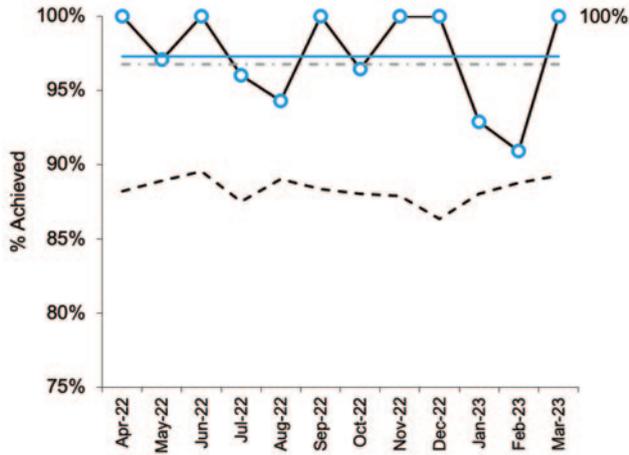
importance of good STEMI care, virtual CPD sessions, and face to face and virtual delivery of ECG refresher sessions. As a direct result of the improvement initiative, a 28% improvement in delivery of the complete STEMI care bundle, was achieved across the South West sector, between January and July 2022; with the full STEMI care bundle delivered to 83 & 88% of patients in June and July respectively.



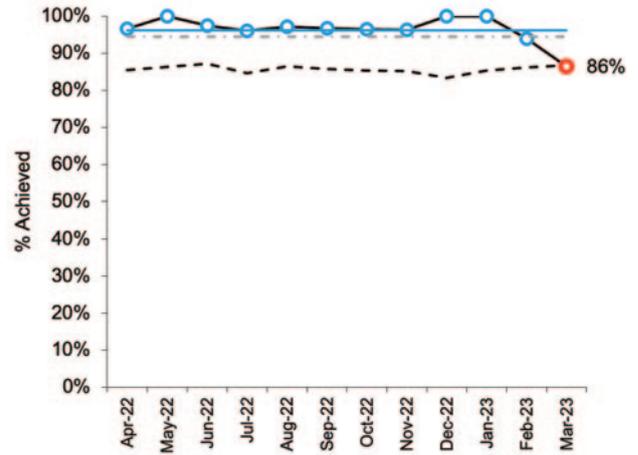
Unfortunately, this improvement was not sustained, and compliance varied between 64 and 80% for the remainder of the year. While this was disappointing, improvements in specific elements of care were achieved and sustained for the

majority of the year. Specifically the documenting of two pain assessments, and the administration of both aspirin and GTN; both of which saw compliance of 100% by December 2022, being 6% and 5% above LAS average respectively.

**Two pain assessments documented (SWL)**



**Both aspirin and GTN administered (SWL)**



These improvements are being rolled out to the other Sectors through the Senior Sector Clinical leads. During 2023/24 we will be continuing to focus on achieving improvements, maximising the opportunities for sharing learning through

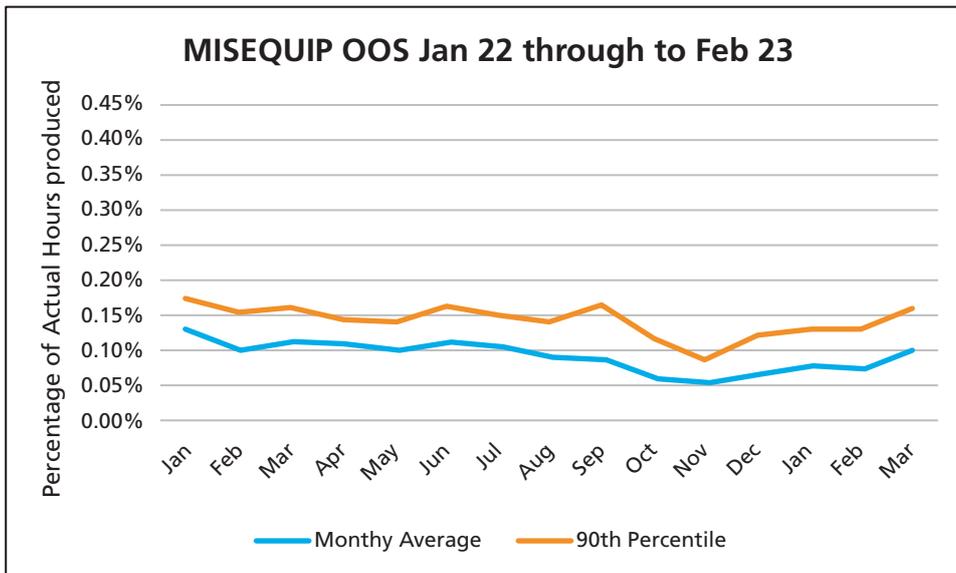
teams based working in conjunction with other methods; in order to maintain improvements, and aim of increasing compliance with administration of analgesia.



**Objective 12: Back to basics: kit and equipment**

We sought to reduce missing equipment incidents and we continue to see a reduction in out of service for this reason. We have now launched auto-replenishment of equipment at hubs, which will increase

the availability of equipment when and where it is needed. We have seen a significant improvement in this area, with a reduction from the 2021 average of 0.14% to 0.07% in the last quarter of 2023/24.



We have begun implementation of a Central Asset Management System for equipment which monitors the auto-replenishment of consumables against set minimum levels at our Make Ready hubs ensuring greater availability of stock. Further work includes the implementation of a Make Ready App that will provide better oversight of equipment on each DCA, completion of equipment asset tagging and the stencil marking, which has already begun to reduce losses and encourage returns from other Trusts.

Work on quality priorities which were partially achieved in 2022/23 will continue throughout the next financial year and will be monitored as part of our 2023/24 business plan, CQUINs and ongoing quality account priorities.



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## Core Quality Account Indicators Report

### Ambulance Quality Indicator performance - C1-C4 response

During 2022/23 we did not meet our mean or 90<sup>th</sup> centile response standards and our position was worse overall than the previous financial year.

Metric	Standard	Financial Year	
		2021-22	2022-23 <sup>1</sup>
C1 Mean	7 minutes	00:06:50	00:08:08
C1 90th Centile	15 minutes	00:11:35	00:14:02
C2 Mean	18 minutes	00:38:18	00:47:40
C2 90th Centile	40 minutes	01:27:20	01:48:54
C3_Mean		01:37:12	01:41:03
C3 90th Centile	120 minutes	04:08:09	04:19:24
C4_Mean		03:24:40	03:24:40
C4 90th Centile	180 minutes	07:22:25	07:29:50

The London Ambulance Service considers that this data is as described for the following reasons: this data is captured from a number of sources, such as the computer aided dispatch system, electronic and paper care records, and our vehicles' Mobile Data Terminals. A variety of Data Quality process are then undertaken in order to provide assurances over the data's accuracy. Reducing delays will continue to be a quality priority for 2022/23, with an agreed trajectory to bring C2 response

times below 30 minutes by the end of the financial year.

#### Ambulance Quality Indicator performance – STEMI, Stroke & Cardiac Arrest care bundles

The Trust submitted the following information to NHS England for the reporting period 2022/23 and 2021/22 regarding the provision of an appropriate care bundle to STEMI patients and those resuscitated after cardiac arrest, as well as a diagnostic bundle for stroke patients.

<sup>1</sup> 2022/23 Response Time Performance excludes Oct'22 and Nov'22 data please see the Annual Governance Statement for further explanation. This is due to a data coding error which led to incorrect reporting of some category 1 response times between August 2020 and September 2022. This error was identified following implementation of our new computer dispatch system, reported to NHS England and has subsequently been subject to independent review.

	2021-22		2022-23*	
	LAS average	National average (Range)	LAS average	National average (Range)
<b>STEMI patients</b>	67.7%	75.5% (60.4-93.6)	70.4%	72.8% (58.4-96.8)
<b>Stroke patients</b>	94.8%	97.3% (94.7-99.3)	96.1%	96.4% (93.2-99.7)
<b>Cardiac Patients**</b>	84.9%	77.2% (62.1 -84.9)	86.5%	77.9% (60.3-97.7)

\*At the point of preparation of this Quality Account, NHS England published data for April to November 2022.

\*\* Post – resuscitation patients only

### Patient safety incidents

The number and rate of patient safety incidents reports during 2021/22 and 2022/23 are as follows:

	2021/22	2022/23
Total Patient Safety Incidents Reported	5,968	6,580
Rate of Patient Safety Incidents/1000 EOC Contacts (average)	2.68	3.16

	2021/22	2022/23
Total Patient Safety Incidents Reported	2,303	2,368
Rate of Patient Safety Incidents/1000 111 Calls (average)	0.93	1.36

The number and rate of patient safety incidents reports resulting in severe harm or death during 2021/22 and 2022/23 are as follows:

	2021/22	2022/23
Total Patient Safety Incidents Reported (EOC Contacts)	5,968	6,580
Total Patient Safety Incidents – Severe or Death	78	176
Rate of Patient Safety Severe or Death Incidents/100 Patient Safety Incidents (average)	1.3	2.68

	2021/22	2022/23
Total Patient Safety Incidents Reported (111)	2,303	2,368
Total Patient Safety Incidents – Severe or Death	3	9
Rate of Patient Safety Severe or Death Incidents/100 Patient Safety Incidents (average)	0.16	0.38

The London Ambulance Service considers that this data is as described for the following reasons: this data is captured on

the Trust Risk Management system, Datix, and rates indicate a good reporting culture. The number of patient safety incidents

reported per month saw an increase between September and December 2022 with 18 consecutive weeks above the mean. This is attributed to a sustained period of high demand and associated REAP4, and further considers the implementation of ClericCAD. The main theme through incident reporting (over the past 2 years) is delayed response.

All patient safety incidents are reviewed to ensure that a proportionate response is applied, in line with the Patient Safety

Incident Response Framework. The London Ambulance Service has taken the following actions to improve this and so the quality of our service by reviewing patient safety incidents relating to delays via a Structured Judgement Review (SJR) process to ensure consistent and robust oversight of delays and identify any system-wide learning. This led to improvement work targeting the dispatch of fast response units to high risk determinants, such as patients presenting with chest pain, and further reviewing the adequacy of the welfare ring back process.

## Clinical Audit and Research

The Trust has a robust and diverse clinical audit and research programme that focuses on a range of clinical areas and is responsive to both local and national priorities. During 2022/23, we examined the care provided to a wide range of conditions including cardiac arrest, acute coronary syndromes, stroke and severe sepsis, difficulty in breathing, mental health, sickle cell crisis, pain, transient loss of consciousness, and medicines administration. We also continued to audit the quality of care and appropriateness of decisions made for patients who were discharged of our care.

Our research program continued to perform strongly (see Appendix 1). We collaborated on successful bids for funding and have had seven publications in peer-reviewed scientific journals, and presented at international conferences.

We continued to support the development of the NHS England Ambulance Quality Indicators, working with NHS England on behalf of the National Ambulance Service Clinical Quality Group. Our Head of Clinical Audit & Research continues to Chair the National Ambulance Research Steering

Group, and sits on various committees with key partners and stakeholders (including the British Heart Foundation and the UK Resuscitation Council) to continue to champion and develop prehospital research nationally, encourage collaboration and influence changes to national policy and practices.

### Research

The number of patients receiving relevant health services provided or sub-contracted by the London Ambulance Service from 1st April 2022 to 30th January 2023 that were recruited during that period to participate in research approved by a research ethics committee was 997. In addition, 41 staff participated in NIHR portfolio studies as participants.

### Clinical audit

During 2022/23, two national clinical audits and no national confidential enquiries covered NHS services that the London Ambulance Service NHS Trust provides. During that period, the Trust participated in 100% of national clinical audits in which it was eligible to participate. The national clinical audit and national confidential enquiries that the Trust was eligible to



participate in during 2022/23 are as follows:

### 1. National Out-of-Hospital Cardiac Arrest Outcomes (OHCAO)

### 2. NHS England Ambulance Quality Indicators: Clinical Outcome measures covering:

- Outcome from cardiac arrest:
  - Number of patients
  - Return of Spontaneous Circulation (ROSC)
  - Survival
  - Post-resuscitation care bundle
- Outcome from acute ST-elevation myocardial infarction (STEMI)
- Outcome from stroke
- Outcome from sepsis

The national clinical audits that the Trust participated in, and for which data collection was completed during 2022/23, are listed below alongside the number of cases submitted to each audit as a percentage of the number of registered cases required by the terms of that audit.

National Clinical Audit	Number of cases submitted*	Percentage of cases submitted as eligible for inclusion
National Out-of-Hospital Cardiac Arrest Outcomes (OHCAO)	5,991	100%
NHS England AQI: Outcome from cardiac arrest a) Total number of cardiac arrests	a) 5,972	100%
NHS England AQI: Outcome from cardiac arrest – ROSC at hospital a) Overall group b) Utstein comparator group	a) 2,102 b) 257	100%
NHS England AQI: Outcome from cardiac arrest – 30-day survival a) Overall group b) Utstein comparator group	a) 2,071 b) 248	100%
NHS England AQI: Outcome from cardiac arrest – Post resuscitation care a) Care bundle delivered to non-traumatic adult cardiac arrests who achieve ROSC (includes 12 lead ECG assessment, blood glucose and blood pressure measurements, and provision of oxygen and fluids)	a) 291	100%
NHS England AQI: Outcome from acute STEMI a) Time from call to angiography for confirmed STEMI patients: Mean and 90th centile b) Care bundle delivered to suspected STEMI patients (includes provision of GTN, aspirin, two pain assessments and analgesia)	a) 516 b) 443	100%
NHS England AQI: Outcome from stroke a) Time from call to arrival at hospital for stroke patients confirmed by SSNAP: Mean and 90th centile b) Diagnostic bundle delivered to suspected stroke patients (includes assessment of FAST, blood pressure and blood glucose)	a) 2,037 b) 2,228	100%
NHS England AQI: Outcome from sepsis – Sepsis care bundle a) Care bundle delivered to adult suspected sepsis patients with a National Early Warning score of 7 and above (includes a set of clinical observations, provision of oxygen, fluids and pre-alert)	a) 1,332	100%

\*At the point of preparation of this Quality Account, OHCAO and NHS England reported data were available for April 2022 – September 2022.

The Trust considers that the data in the table above is as described for the following reasons: this data is captured by the LAS from clinical records completed by ambulance clinicians attending patients as part of on-going clinical quality monitoring in line with the technical guidance for the Ambulance Quality Indicators and reported to NHS England.

The reports of the above national clinical audits were reviewed by the provider in 2022/23 and the Trust has taken actions to improve the quality of healthcare provided (see Appendix 2).



## Looking Forward: Our Quality Priorities for 2023/2024

For the new financial year, we have identified 5 quality priorities. In order to shape the priorities around the needs of our patients, we developed a task and finish group, and undertook engagement with key stakeholders, including members of the Public and Patients Council (which provides a voice for patients in the design, development and delivery of services).

In identifying these priorities, we have considered:

- Our progress against the 2022/23 quality priorities
- Triangulation of data sources
- The new CQC strategy and framework
- Sources of quality intelligence and performance metrics, business plans and our strategic intentions
- What matters to our staff, patients and the communities we serve.

Our 5 priorities for 2023/24 are:

- **Cardiac arrest management**
- **Care after a fall**
- **Hear & treat consultations**
- **Reducing delays**
- **Infection Prevention and Control**

To deliver improvements in these priority areas, we have identified several specific objectives and will use key performance indicators to measure improvement over the coming year.

Our progress against these priorities will be monitored and reported on a monthly basis throughout the year to ensure we deliver

meaningful improvement on each objective. A full report will be included in the annual Quality Account for 2023/24.

Quality Priority	Source	KPI(s)
<b>Cardiac arrest management</b>	<ul style="list-style-type: none"> <li>• Patient safety incidents</li> <li>• National Benchmarking</li> </ul>	<ul style="list-style-type: none"> <li>• Improve return of spontaneous circulation rates to <math>\geq 30\%</math></li> <li>• Deliver resuscitation update training to 85% of staff</li> </ul>
<b>Care after a fall</b>	<ul style="list-style-type: none"> <li>• Patient safety incidents</li> <li>• Clinical Performance Indicators</li> </ul>	<ul style="list-style-type: none"> <li>• <math>\uparrow</math> Urgent Community Response provision to 16 response teams pan-London</li> <li>• Deliver spinal immobilisation training to 85% of staff</li> </ul>
<b>Hear &amp; treat consultations</b>	<ul style="list-style-type: none"> <li>• Trust Risk Register</li> <li>• Licensing requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Clinical Guardian across 999 and 111</li> <li>• Implement Category 2 Segmentation Programme</li> </ul>
<b>Reducing delays</b>	<ul style="list-style-type: none"> <li>• Patient Safety Incidents</li> <li>• Ambulance Quality Indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Achieve a <math>\leq 30</math> minute C2 mean in line with trajectory</li> <li>• Achieve a <math>\leq 10</math> second call answering mean in line with trajectory</li> </ul>
<b>Infection Prevention and Control</b>	<ul style="list-style-type: none"> <li>• Quality visits</li> <li>• IPC Audit Validation</li> </ul>	<ul style="list-style-type: none"> <li>• Achieve 90% hand hygiene audit compliance</li> <li>• Implement audit software replacement</li> </ul>



Emergency Ambulance

NHS

London Ambulance Service  
NHS Trust

999

111

## Part 3

# Statements on Quality Infrastructure

### Patient Experience

Patient experience and feedback can help us to understand whether our service is safe, caring, responsive, effective and well-led.

We therefore welcome and take all patient and stakeholder feedback very seriously in order to identify any care and service delivery problems and share learning to improve our service.

Trends and emerging themes are regularly reported through the Trust's governance forums. To widen the learning, we publish anonymised case examples on the Trust website and have contributed anonymised case examples to our 'Insight' publication which is disseminated across the Trust. We

similarly report cases of significance to the National Ambulance Service Patient Experiences Group, comprising all UK ambulance services. We work closely with advocacy providers, especially POHWER, the largest provider in London.

We have set up weekly meetings to triage new complaints. Specific cases relating where the service provided affected the patient's outcome are routinely shared with the Executive team for review. We also routinely escalate cases to the Quality, Improvement and Learning team where harm has occurred and to ensure that a joined-up approach is taken as part of the Patient Safety Incident Response Framework.

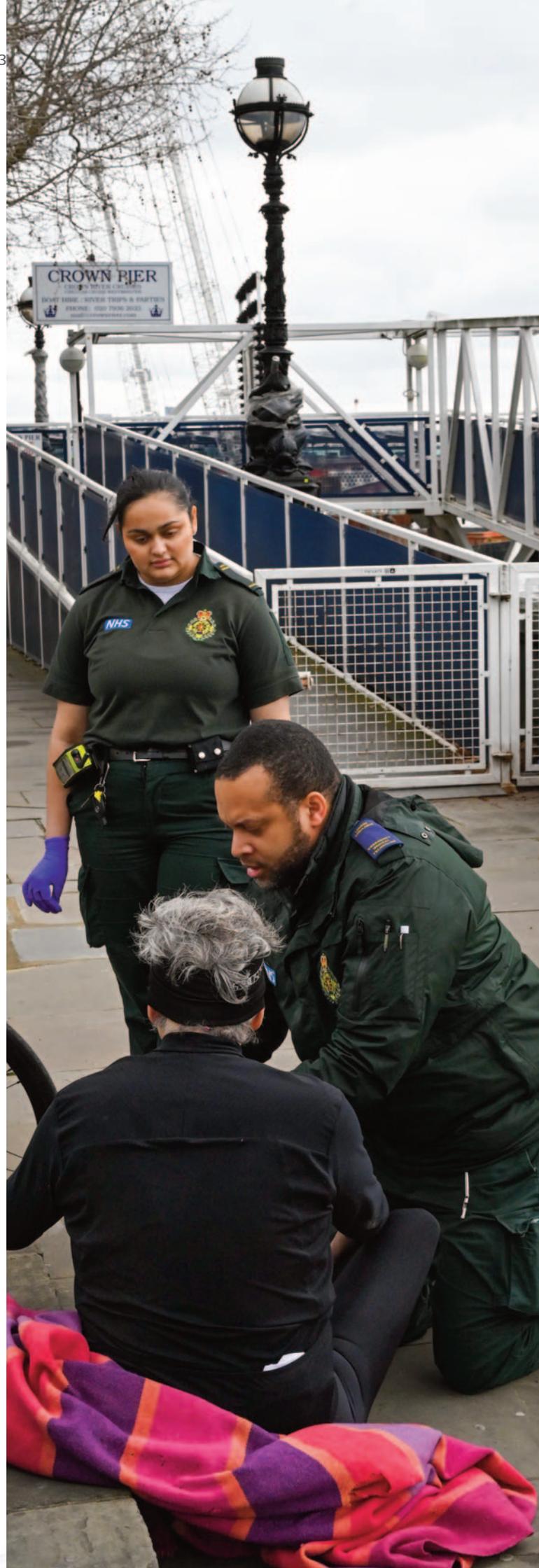


We have successfully negotiated with senior managers from other teams regarding investigation turnaround times and introduced clear monitoring and escalation process for overdue investigations. These have been included in a new Standard Operating Procedure for complaints management.

Learning from complaints is routinely identified and shared via local management teams. We continue to work with local management teams to ensure that learning is shared effectively with affected staff and that staff are engaged with the complaint process. Effective engagement with patients and staff regarding the complaints process is embedded in our revised complaints and feedback policy. The policy is based on the Parliamentary and Health Service Ombudsman's model complaints handling guidance.

We publish information about communicating with us in other languages and in easy read format on our website. An online complaints form is sent to each complainant to inform us of how we have managed their complaint.

We continue to have a strong working relationship with the Parliamentary and Health Service Ombudsman. We have recently been the pilot site representing all UK Ambulance Trusts to design the new NHS Complaint Standards. The standards include early resolution of complaints and embedding a quality improvement culture across the Trust.



## Safeguarding

Safeguarding provides assurance through the Safeguarding Assurance Group to the Quality Oversight Group. We report on our activity for 999 services via the Safeguarding Health Outcomes Framework Template and via quarterly reports for our IUC services. The Trust attends the Brent Safeguarding boards for children and adults and provides further assurance through those boards.

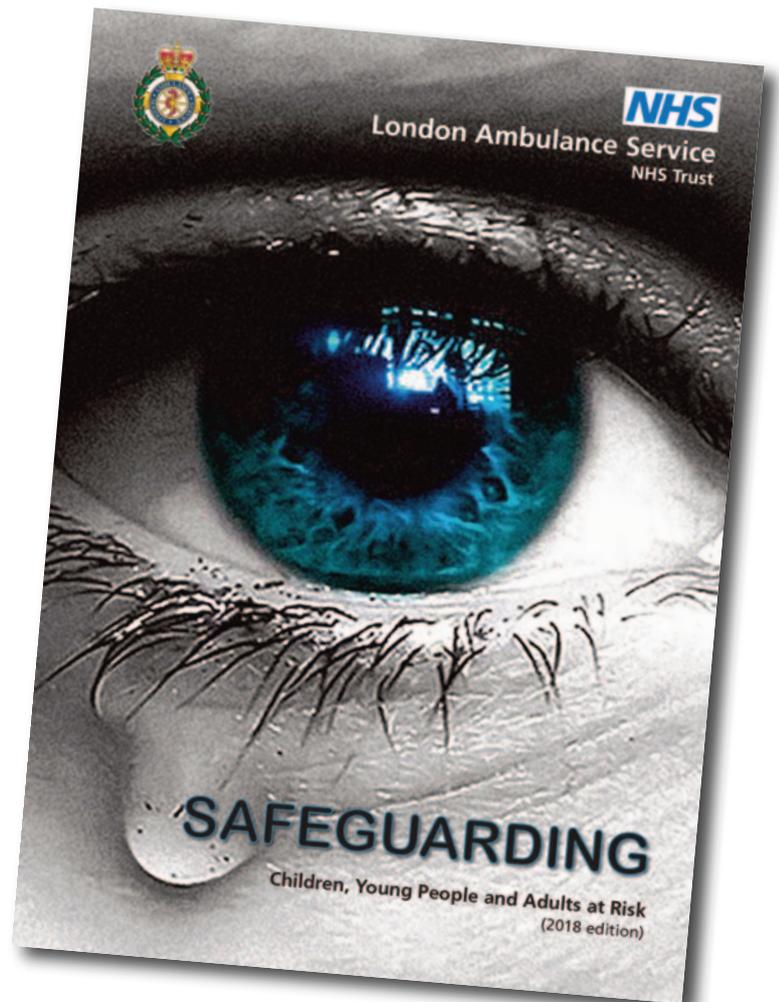
We have a range of policies and procedures in place in respect of safeguarding, and keep these up to date and well communicated to our staff.

Safeguarding referrals and concerns being raised by staff remain within expected range, demonstrating staff awareness of safeguarding issues and the importance of reporting these.

We have continued to see an increase in the reporting of safeguarding allegations against staff, including in relation to sexual assaults and harassment. This was expected following the launch of our Sexual safety Charter and campaign to encourage staff to speak up.

Safeguarding training is part of our statutory and mandatory training programme and in line with the intercollegiate document. Safeguarding training is delivered using a combination of e-learning and face-to-face (including virtual) education. Training is provided to a high standard by Trust Safeguarding Specialists. We achieved by end of calendar year 87.96% for level 1, 54.46% for level 2 and 84.33% for level 3, level 2 & 3 are below our compliance targets, which are 85% by end of financial year and a recovery plan is in place to improve compliance.

The Trust provides information to Multi Agency Risk assessment conferences and participates in Safeguarding Adult Reviews



(SAR's), Safeguarding Child Practice Reviews (SCPR) and Domestic Homicide Reviews (DHR) when required.

In November we held a Safeguarding Conference for 200 staff and covered a range of topics with lived experiences, including Trauma informed care and CSA, having difficult conversations, learning from incidents, Serious Crime Act and Domestic Abuse Act and duty to report. Substance misuse and safeguarding impact, online gaming & grooming and Learning disabilities. The Deputy Chief Executive Officer also presented a number of Safeguarding Star Badges and Certificates for outstanding safeguarding work.

Full details of safeguarding can be found in the LAS Safeguarding Annual Report.

## Information Governance

The Trust continues to strengthen its arrangements for Information Governance

(IG). We have a robust programme of IG improvements and awareness and a governance framework to monitor and assure the security of our information. An executive-led Information Governance Group is in place, as well as an Information Governance Policy framework. These ensure the execution of the Trust IG agenda.

IG incidents are reported via the Trust incident reporting system, Datix, which is the Trust risk management system. The Information Governance Manager is notified and reviews the IG incidents and, where necessary by the Quality Governance and Assurance team. Where there has been an incident resulting in the compromise to patient or staff identifiable data, and depending on the seriousness of such incident, a report is made on the Data Security and Protection Toolkit (DSPT) within 72 hours of the notification of the incident reaching the IG Manager in line with the General Data Protection Regulations (GDPR) requirements.

Dependent on the nature of the incident, the information provided on the DSPT is

sent to the Information Commissioner's Office, the Department of Health and Social Care, NHS England and/or the National Cyber Security Centre. During 2022/23 four incidents were notified via the data security incident reporting portal. Of these, all four were reported to the ICO and one was also reported to the Department of Health and Social Care and NHS England. This incident specifically related to an external cyber-attack upon a third party software supplier used by the Trust. Of the four incidents reported, two have now been fully investigated and the cases are now closed with the ICO.

On or before 30 June 2023, the Trust will be expected to submit a self-assessment of its Data Security and Protection status via the NHS Digital's Data Security and Protection Toolkit (DSPT). This is a mandatory submission by all organisations that have access to NHS patient data and it provides assurance that they are practising good data security and that personal information is handled correctly. Based on progress so far, the Trust is on course to provide a "Standards Met" DSPT submission.



Throughout 2022/23, we have continued to participate in CQC engagement meetings and responded to routine enquiries. All enquiries have been responded to appropriately with no outstanding queries requiring action.

We retain a rating of 'Good' overall.

## CQC rating

**Good**

## Statements from stakeholders

### London Ambulance Service Patient and Public Council

Thank you for sharing the London Ambulance NHS Trust Quality Account for 2022/23.

The London Ambulance Service Public and Patients' Council (LASPPC) recognises that this account has been produced at a time where the London Ambulance Service continued to experience extremely high levels of demand as well as industrial action over December, January, February and March. The Council would like to acknowledge and thank staff and volunteers from across the Service for their outstanding commitment and dedication to patients across London during this very challenging time.

In light of this sustained pressure and demand, the Council has been impressed by the progress made in the quality priorities set last year (2022/23) and are pleased to have worked collaboratively with the Trust on a number of these priorities.

The Council has worked closely with the Trust on developing the priorities for the year, and are proud that council member representatives have provided a voice for patients and the public in a number of the Trust's committees and working groups. We have supported a number of key initiatives across the organisation, as well as providing input on the delivery and implementation of the service through our regular Council meetings.

The Council has also worked collaboratively

**Christine Beasley**  
Co-Chair

with the Trust as they continued to make improvements in a number of other quality priorities for 2022/23. For example, including involvement in the development of the Trust's new 5 year strategy and emerging estates 'vision'. Reports from regular council meetings are also presented to the Trust board.

We have been impressed with the level of engagement the Trust has done to involve the Council in the year's quality priorities and we would like to express our appreciation and thanks to your staff who have made progress whilst continuing to manage a huge increase in demand following the pandemic and through periods of industrial action. We also acknowledge their determined commitment to delivering high quality services to patients and we look forward to seeing this relationship becoming stronger throughout the upcoming year.

In looking forward to the quality priorities of 2023/24, the Council can confirm that our members were involved in the development of these priorities, and during these development sessions members welcomed, but also fed into, the five priority areas set out for the year. These priorities demonstrate that patients are truly at the heart of the Service and we are looking forward to another year of working together closely as the Trust sets out to achieve them.

**Michael Bryan**  
Co-Chair

**Commissioners' Statements**

Charlie Sheldon  
Chief Nursing Officer  
NWL ICB  
15 Marylebone Road  
London NW1 5JD

Email: [nhsnw1.headsofquality@nhs.net](mailto:nhsnw1.headsofquality@nhs.net)

23 May 2023

Daniel Elkeles  
Chief Executive Officer  
London Ambulance Service NHS Trust  
220 Waterloo Road  
London SE1 8SD

**SENT BY E-MAIL**

Dear Mr Elkeles

**Re: London Ambulance NHS Trust Quality account 22/23**

The NHS North West London Integrated Care Board (NWL ICB) and its Associate Commissioners welcome the opportunity to review and provide a commissioner statement for the London Ambulance Service NHS Trust Quality Account for 2022/23 having reviewed the information contained within the account. Where possible, information has been cross referenced with data made available to commissioners during the year.

The ICB acknowledges and thanks the Trust for its hard work and dedication to providing quality care during what has continued to be an exceptionally challenging time. Commissioners have been particularly impressed by the Trust's commitment, resilience and collaborative working with system partners.

The account provides an informative summary of the work undertaken during 2022/23 and showcases an equitable balance between the positive achievements and acknowledgement of areas identified for improvement. The ICB recognises the efforts made thus far and is supportive of the Trust's decision to extend timelines for implementing Quality Advocates into all sectors by 2023/24 that were affected by operational pressures.

The commissioners note the progress made against the 2022/23 quality priorities and recognise the positive actions the Trust has taken through a number of innovative initiatives to improve emergency response times and maintain patient safety; such as the 'NHS England Category 2 segmentation pilot' and 'Urgent Crisis Response service'. Most importantly, the Trust has demonstrated real ambition and commitment

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**The North West London Integrated Care System is a collaboration of NHS, local authority,  
voluntary and community sector organisations**

to addressing health inequalities by the recruitment of a Public Health specialist to help progress the health inequalities agenda forward.

The ICB would like to thank the Trust for its engagement efforts with various stakeholders in the identification and shaping up of the set quality priorities for the coming year. Commissioners would have welcomed more information on patient experience and engagement, in addition to how the service could learn from people with lived experiences in service developments.

The ICB is satisfied that the overall content of the quality account meets the required mandated elements.

On behalf of NWL ICB and Associate Commissioners, we can confirm that to the best of our knowledge, the information contained in the report is accurate. The ICB supports the on-going quality priorities for 2022/23 and looks forward to working with the Trust in exploring further quality improvement initiatives to build on the provision of safe and effective services for our patients.

I would like to take this opportunity to thank the Trust for its continued focus on quality in 2023/24.

Yours sincerely



Charlie Sheldon  
**Chief Nursing Officer**  
**NHS North West London**



Dr John Byrne  
Chief Medical Officer  
South West London ICB  
3<sup>rd</sup> Floor, 120 The Broadway  
Wimbledon SW19 1RH

19 June 2023

Dear Jacqui,

**Re: London Ambulance Service (LAS) Quality Account 2022/2023**

Thank you for sharing the Trust's 2022/2023 Quality Account with South West London Integrated Care Board (SWL ICB). Having reviewed the Quality Account, we are pleased to see the progress made by the Trust in maintaining high quality care standards. It is evident that there is a significant amount of positive work the Trust has undertaken to improve outcomes for both patients and staff. We acknowledge the significant level of demand and pressure the Trust has seen over the last 12 months not just with the London Ambulance Service facing handover delays to EDs but the pressures front line colleagues have faced in many Urgent and Emergency Care services across the country. We commend the resilience of our ambulance colleagues.

The ICB congratulates the Trust on achieving the priorities set for 2022/2023 and identifying areas where work will continue into 2023/2024 and applauds the Trust for being one of the early adopters of the Patient Safety Incident Response Framework (PSIRF) implementation.

We are assured to hear that the time from arrival on Scene to CPR (SPC) being started has remained below the target of five minutes and is within the SPC control limits, and that you are concentrating on improving the delivery of the STEMI (ST-segment elevation myocardial infarction) care bundle, which is currently below the target of 80%.

We applaud that you are improving the identification and referral of unrecognised hypertension responding to the rise in incidents of cardiovascular disease and stroke and linking with CORE20PLUS approach to reducing health inequalities.

Please note our gratitude to the Trust on your proactive engagement and commitment with SWL partners to embed system learning following the recent multi-agency patient safety incident and investigation.

For 2023/2024, we acknowledge the Trust has identified the following quality priorities:

**Clinical Effectiveness**

1. Cardiac arrest management
2. Care after a fall
3. Hear and treat consultations
4. Reducing delays and infection
5. Prevention and control.

**We acknowledge other objectives within your report:**

- Improving the care of patients with sickle cell disease through early identification, optimising their treatment and conveyance/ referral decisions



- Identifying health inequalities within pre-hospital maternity care to improve clinical decision making and improved patient experience.

We recommend that the Trust considers the following actions within its agreed priorities:

- Working towards the delivery your health inequalities plan
- Working towards improving cultural awareness as well as equalities, diversity and inclusion within your workforce
- Working closely with patients and communities with lived experience to improve quality of care.

We look forward to continued work with the Trust under our partnership arrangements and strengthening our collaborative approach to system quality improvement.

Yours sincerely

A handwritten signature in black ink that reads 'John Byrne'. The signature is written in a cursive style and is contained within a light grey rectangular box.

**John Byrne**  
**Chief Medical Officer**

## Appendix 1: Research Activity

### Ongoing research projects from 1<sup>st</sup> April 2022 to 09<sup>th</sup> February 2023:

**RAPID-MIRACLE** is a prospective observational study that validates the MIRACLE2 score in the prehospital setting. The MIRACLE2 tool was designed by researchers at KCH in collaboration with LAS to predict neurological outcomes for patients in out-of-hospital cardiac arrest. The tool aims to stratify patients based on the nature of their cardiac arrest, taking account of variables like age, shockable rhythm and adrenaline administration.

**ARREST:** a randomised-controlled trial exploring whether immediate coronary angiography and percutaneous coronary intervention can improve survival from cardiac arrest.

**CRASH-4:** a placebo controlled, randomised-controlled trial investigating the role of tranexamic acid in the management of older patients with mild, symptomatic, traumatic brain injury.

**PARAMEDIC-3:** a randomised-controlled trial that aims to identify the best route (intravenous vs. intraosseous) for the administration of adrenaline in out-of-hospital cardiac arrest.

**PROTECTeD:** this study aims to develop evidence based and ethically grounded guidelines for termination of resuscitation by ambulance service staff in the UK.

**HOTZONE:** a mixed-methods study examining the causes and timeframes in which casualties to die prior to reaching hospital to establish options for the delivery of interventions that may be beneficial during certain mass casualty incidents.

**SEE-IT:** a feasibility randomised controlled trial that aims to determine the clinical and cost effectiveness of using GoodSAM video streaming to target emergency medical resources.

**CATNAPS:** a multi-method study aiming to develop a new approach to fatigue management for UK ambulance services that meets the needs of staff and operations, and is most likely to improve patient and staff safety.

**OPTIMAL-CARE:** a study involving a survey and qualitative interviews with LAS staff to identify the perceived value and impact of electronic palliative care coordination systems.

**STRETCHED:** evaluating case management approaches to the care of patients who frequently call the emergency ambulance service.

**SUB-30:** a feasibility study that aims to assess whether prehospital extra-corporeal membrane oxygenation (ECMO) can be established within 30 minutes of collapse following out of hospital cardiac arrest in London.

**PHOTONIC:** an observational study aiming to evaluate the use of prehospital video triage services for suspected stroke patients.

**PRE-FEED:** a mixed-methods diary study examining the predictors and effects of prehospital feedback to emergency ambulance staff on performance and patient outcomes.

**CDM TBI:** a mixed-methods study examining ambulance clinicians approaches to head injuries in older adults.

## Appendix 2: Clinical audit activity and learning outcomes

### National clinical audits

The reports of the national clinical audits were reviewed by the provider in 2022/23 and the Trust has taken actions to improve the quality of healthcare provided:

- Released monthly and annual reports and infographics promoting the key findings of the review of cardiac arrest, STEMI and stroke care
- Provided both constructive and positive feedback to staff regarding inappropriate triage decisions, incomplete care bundles, and extended response times

### Clinical audit projects

The reports of 5 local clinical audits were reviewed by the provider in 2022/23 and the Trust plans to take/has already undertaken the following actions to improve the quality of healthcare provided against each audit as detailed below:

#### **Chronic Obstructive Pulmonary Disease (COPD)**

- We requested that the UK COPD ambulance services guidelines are clarified regarding the requirement for 12-lead ECGs, pre-alerts, the indications for salbutamol and concurrent administrations of salbutamol and ipratropium bromide
- Enhancements to the electronic Patient Care Record (ePCR) were advised to improve time data accuracy, documentation of duration of nebulisation and the inspection fields
- We suggested that the Trust considers of air-driven nebulisers

- Teaching materials were updated
- Clinical audit findings were widely shared to clinicians

#### **Paediatric Pain Management**

- Reminders to document units and time of medicines administration were included in mandatory clinical training
- A Medical Bulletin was published reminding clinicians of the oral paracetamol dose for 12 year olds
- Clarification was sought on the national guidelines for IV paracetamol for 12 year old patients and they were asked to consider adding weight-based recommendations for oral morphine for paediatric patients
- Potential ePCR related solutions to unit and time documentation errors will be discussed at ePCR Data Quality Meetings
- Provision of an ibuprofen dose suitable for all paediatric patients is being explored

#### **Transient Loss of Consciousness (TLoC)**

- A TLoC section will be added to the ePCR with prompts to encourage documentation of the TLoC event history
- It will be recommended that cardiac auscultation skills be added to mandatory clinical training to ensure clinicians are able to distinguish between normal and abnormal heart sounds
- Additions to Paramedic Pathfinder will be suggested, specifically for patient patients presenting with no red flags and a history of unconsciousness so that care pathways align with JRCALC and NICE Clinical Practice Guidelines

**Dexamethasone**

- LAS guidance will be updated to reflect the changes in national guidelines regarding age of administration
- Clinical audit findings were shared with clinicians

**Cardiac Arrest Complicated by Hyperthermia**

- Appropriate cooling methods for out of hospital cardiac arrest will be explored
- Clinical audit findings were shared with critical care advanced paramedic practitioners.

In addition, a further **5 local clinical audits** have been started by the provider in 2022/23, as well as a programme of continuous clinical audit:

**The use of Entonox™**

Entonox (nitrous oxide) is an inhaled analgesic. The objectives of this clinical audit are to determine if Entonox is being administered in line with guidance and to identify any additional patients that may have benefitted from Entonox use. This clinical audit will also provide an opportunity to gather information on the demographics of patients who receive or are indicated to receive inhaled analgesics. The production, transportation, and wastage of Entonox contributes to the overall carbon footprint of the NHS and the LAS is committed to greener initiatives, so this project will contribute to its exploration of other analgesics in line with relevant product licences.

**Haemorrhage of a Traumatic Origin**

Uncontrolled haemorrhage is one of the most common preventable causes of death in the trauma population. Patients who are haemorrhaging require prompt and effective treatment to improve the chance

of survival and minimise long-term disability. The London Trauma System operates a primary bypass to Major Trauma Centres (MTCs) pathway for severely injured patients. This clinical audit will assess the management of patients with haemorrhage of a traumatic origin in collaboration with the North West London Trauma Network.

**Response times, assessment, and management of patients who have taken an overdose**

In 2021/22 several potential incidents were reported relating to patients who had taken an overdose. In addition, previous clinical audit cycles have identified the response, assessment and management of this group of patients is an area for improvement. This clinical audit aims to determine whether target response times are met and to evaluate whether patients who have taken an overdose are assessed and managed in accordance with JRCALC Clinical Practice Guidelines.

**Smoke inhalation injuries**

Although rarely attended by most LAS clinicians, patients with smoke inhalation can rapidly deteriorate therefore it is important to ensure that the national guidance is adhered to for this patient group. This clinical audit aims to evaluate compliance with JRCALC guidelines in relation to the assessment, treatment and transportation of patients with smoke inhalation injuries.

**Prescribing by APP-UC**

Urgent care advanced paramedic practitioners (APP\_UC) are introducing face-to-face independent non-medical prescribing in to the 999 environment. This clinical audit is an essential part of the clinical governance for non-medical prescribing for the six-month pilot period to ensure compliance with the Procedure for APP Prescribing and Non-Medical

Prescribing Policy and to ensure clinical indications are met for individual medicines and any safety incidents are identified.

### ***Continuous quality monitoring***

We are continuously auditing the care provided to four patient groups: those who suffer a cardiac arrest, heart attack (ST elevation myocardial infarction), suspected stroke (including FAST positive stroke), or were discharged of our care but re-contacted the within 24 hours having severely deteriorated or died unexpectedly. Findings from these four continuous audits are shared internally and staff receive feedback to support learning where indicated.

In addition, the Trust also regularly monitors compliance with clinical guidelines in relation to the administration of oramorph, antimicrobials, repeat medications, medication of potential misuse, medication safety indicators and high-risk medication prescribing.

### ***Clinical Performance Indicators (CPIs)***

London Ambulance Service undertakes a programme of local Clinical Performance Indicators which, during 2022-23, monitored the care provided to 22 patient groups. The Trust audited the records completed by all clinicians for patients in cardiac arrest; with difficulty in breathing; a mental health condition; severe sepsis; elderly fallers and patients discharged on-scene. In 2022/23 we also introduced new CPIs assessing the management of sickle cell crisis and end of life care.

In addition, the Trust has specific audits focusing on the care provided by our Advanced Paramedic Practitioners (APPs). APPs specialising in Critical Care audit the records for adult patients with a (non-traumatic) cardiac arrest, acute behavioural disturbance and major trauma. Our Urgent

Care APPs audit their use of naproxen, prednisolone, prochlorperazine and salbutamol inhalers. We also introduced new monitoring of paediatric assessment; abdominal pain; transient loss of consciousness; headache; wound care, and palliative and end of life care for our Urgent Care APPs.

Finally, the CPIs allow for quality assurance of the documentation of 1.7% of all clinical records completed by ambulance clinicians. Staff receive individual clinical feedback from these audits, highlighting areas of good practice and those in need of improvement.

## Glossary

<b>APP-CC</b>	Advanced Paramedic Practitioner (Critical Care)	<b>IPC</b>	Infection, prevention and control
<b>APP-UC</b>	Advanced Paramedic Practitioner (Urgent Care)	<b>IG</b>	Information Governance
<b>AQI</b>	Ambulance Quality Indicator	<b>IM&amp;SD</b>	Incident management and service delivery
<b>CAD</b>	Computer aided dispatch	<b>IUC</b>	Integrated Urgent Care
<b>CHUB</b>	Clinical HUB	<b>KPI</b>	Key Performance Indicator
<b>COPD</b>	Chronic Obstructive Pulmonary Disorder	<b>LAS</b>	London Ambulance Service
<b>CORE20PLUS5</b>	Core20PLUS5 is a national NHS England and NHS Improvement approach to support the reduction of health inequalities at both national and system level. The approach defines a target population cohort – the 'Core20PLUS' – and identifies '5' focus clinical areas requiring accelerated improvement.	<b>LASPPC</b>	London Ambulance Service Patient and Public Council
<b>COVID-19</b>	Coronavirus disease caused by the SARS-CoV-2 virus	<b>MHJRC</b>	Mental Health Joint Response Car
<b>CPD</b>	Continuing professional development	<b>MTC</b>	Major Trauma Centre
<b>CPI</b>		<b>NIHR</b>	National Institute for Health and Care Research
<b>CPR</b>	Cardiopulmonary resuscitation	<b>NHS</b>	National Health Service
<b>CQC</b>	Care Quality Commission	<b>OHCAO</b>	Out-of-Hospital Cardiac Arrest Outcomes
<b>CQUIN</b>	Commissioning for quality and innovation	<b>OOS</b>	Out of service
<b>DOS</b>	Directory of Services	<b>OWR</b>	Operational workplace review
<b>DSPT</b>	Data security and protection toolkit	<b>PDSA</b>	Plan, do, study, act
<b>ECAS</b>	Emergency Clinical Advisory Service	<b>PGD</b>	Patient Group Direction
<b>ECG</b>	Electrocardiogram	<b>PPE</b>	Personal Protective Equipment
<b>ED</b>	Emergency Department	<b>PSIRF</b>	Patient Safety Incident Response Framework
<b>EOC</b>	Emergency operations centre	<b>PSIRP</b>	Patient Safety Incident Response Plan
<b>ePCR</b>	Electronic Patient Care Record	<b>QI</b>	Quality Improvement
<b>FAST</b>	Face, Arms, Speech Test	<b>REACH</b>	Remote Access Emergency Coordination Hub
<b>FCP</b>	First Contact Paramedic	<b>ROSC</b>	Return of spontaneous circulation
<b>GDPR</b>	General Data Protection Regulation	<b>SDEC</b>	Same day emergency care
<b>GP</b>	General Practitioner	<b>SMS</b>	Short message/ messaging service
<b>GTN</b>	Glyceryl trinitrate	<b>SPC</b>	Statistical process control
<b>ICO</b>	Information Commissioners Office	<b>SSNAP</b>	Sentinel Stroke National Audit Programme
<b>ICS</b>	Integrated Care System	<b>STEMI</b>	ST Segment elevation myocardial infarction
		<b>TLOC</b>	Transient loss of consciousness
		<b>TOC</b>	Tactical operations centre
		<b>UCAS</b>	Urgent Clinical Advisory Service
		<b>UCR</b>	Urgent Community Response
		<b>UTC</b>	Urgent Treatment Centre



London Ambulance Service NHS Trust  
Headquarters  
220 Waterloo Road  
London. SE1 8SD  
[www.londonambulance.nhs.uk](http://www.londonambulance.nhs.uk)