

The Answer to Improving Performance and Staff Retention for Ambulances

How modern technologies like sentiment analysis, stress monitoring and automation are transforming control room operations



The ambulance sector faces a uniquely intense operational environment. The difference between efficiency and inefficiency really is a matter of life or death. But this intensity has stemmed a new challenge. One of staff retention. A recent **NHS England workforce report** revealed that 23.3% of UK ambulance service staff leave their roles annually - a figure far exceeding other emergency services. Behind this statistic lies a combination of chronic stress, emotional exhaustion, and relentless workloads that fuel burnout and drive high turnover rates.

The impact on service delivery cannot be understated. With every resignation, operational knowledge and team cohesion suffer. Staff must pick up additional duties, often leading to heavier workloads and growing frustration. 70% of ambulance workers surveyed in 2024 cited constant turnover as a significant source of stress, contributing to reduced team morale and service consistency. And despite a 2024 Workforce Stress in Ambulance Services Report uncovering that staff who felt supported by their organisation's tools and processes were far more likely to remain in their roles, things don't seem to be moving in the right direction. Control room and operating staff feel under pressure, under supported, and at a dead end.

For ambulance services, the challenge is clear: addressing the causes of control room staff turnover is not only essential for workforce retention but also for maintaining effective, life-saving care under immense pressure.

“ The ambulance sector faces an unprecedented challenge balancing staff retention with increasing operational demands. And citizens are feeling this impact with longer wait times when they most need support. Modern technologies like AI, stress monitoring and automation, are essential to reducing cognitive load and enabling call handlers to perform their roles effectively under pressure, at the speed required. In some scenarios, pressure creates diamonds. For call handlers though, it does nothing but create burnout and inefficiency. Change is needed, and that change is technology. ”

Chris Burden, CEO
Liquid Voice



REAL-TIME STRESS MONITORING AND PROACTIVE SUPPORT

Stress within ambulance control room teams is pervasive but often remains undetected until it manifests as burnout or resignation. However, modern sentiment analysis and AI tools now enable services to take a proactive approach to staff well-being.

Rather than relying on anecdotal feedback, consolidating call recordings in an archive system that includes an analytical view with thorough reporting can:

CATEGORISE AND ACTION BASED ON SENTIMENT

Monitor whether citizen calls are positive, neutral or negative as a whole. In cases where calls end in a positive resolution, these can be categorised separately as positive interactions, which can be used as a best practice example in training. In cases where calls have negative sentiment, they can be analysed using a single pane of glass analytical view to understand why they weren't a quality interaction. This can uncover issues in call handler processes or trends in the overall servicing of citizens.

ENABLE TIMELY INTERVENTIONS

Specified keywords, or even repetition of speech can infer call handler tiredness or fatigue - and these are things that can be monitored. It's even possible to set up automated alerts for team leads and managers when there are signs of prolonged stress that require intervention.

IDENTIFY STRESS EARLY

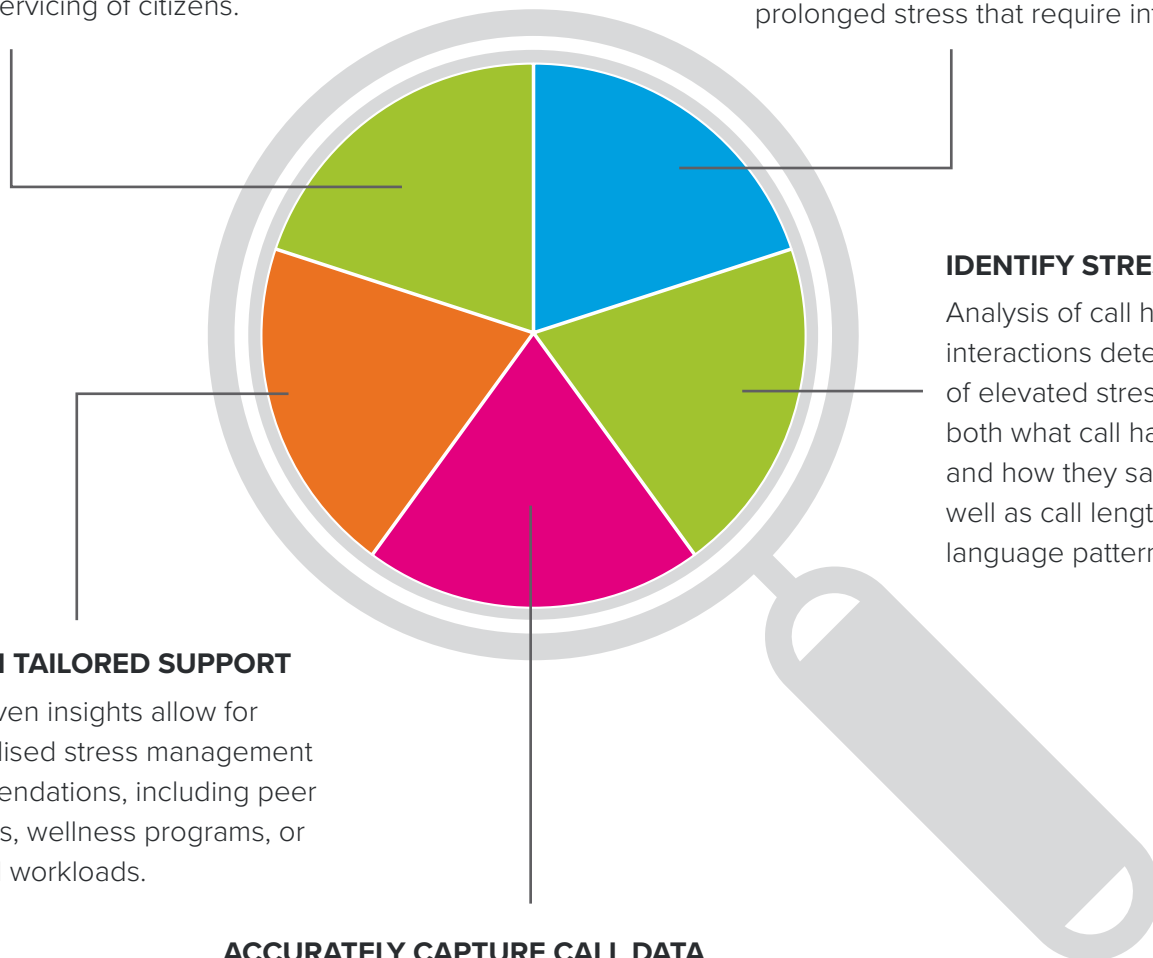
Analysis of call handler interactions detects signs of elevated stress through both what call handlers say and how they say it, as well as call length and language patterns.

INFORM TAILORED SUPPORT

Data-driven insights allow for personalised stress management recommendations, including peer check-ins, wellness programs, or adjusted workloads.

ACCURATELY CAPTURE CALL DATA

Mitigating the risk of misinterpretation or missed detail that comes with call handlers manually note-taking and logging calls, transcription ensures no detail or context is lost when a call is automatically logged during an emergency situation. This practice of automating call logs and notes is estimated to save up to 75% of a call handler's time.



In a UK Ambulance Service Staff Wellbeing Survey, 82% of respondents agreed that proactive stress monitoring would help reduce burnout and improve job satisfaction. This kind of early, targeted support can make a measurable difference in both individual and team resilience, ensuring that control room teams are well-supported and satisfied in their role. These are the basic foundations for retaining staff. Happy staff stick around. Stressed, burned-out staff do not.

“ For several years, Liquid Voice has focused on developing new and emerging tech to provide value-added solutions to real customer pain points. Now, with the advancement of machine learning and artificial intelligence, we have enriched and built on our existing product suite to enable our customers to benefit even more from our solutions. Our sentiment and stress analysis offering has been developed from understanding our customers’ real needs. It provides huge benefits to not only public safety teams but in turn to citizens’ experience as well by way of proven time and cost efficiencies. ”

Helen Rogers, Product & Development Director
Liquid Voice



REDUCING ADMINISTRATIVE PRESSURE TO FOCUS ON WHAT MATTERS

Ambulance call handlers often feel buried under administrative tasks that detract from their critical, high-value responsibilities. A recent analysis of UK ambulance service workloads found that 35-40% of time is spent on manual processes such as report writing, incident logging, and quality assurance reviews.

Automation now offers a way to relieve this pressure:



Automated call handling:

Real-time transcription and interaction summaries reduce the burden of post-call documentation.



Streamlined incident reviews:

Tools can automate reporting for investigations and compliance audits, saving significant time and effort.



Reduced quality audit workload:

Automated systems ensure calls are reviewed consistently without requiring extensive manual checks.



Resilience planning:

Post-incident analysis and after-action reviews (AARs) become faster, enabling more informed decision-making for future challenges.

By reducing administrative overhead, ambulance staff can redirect their focus to core tasks - providing timely, effective service. One citywide NHS Trust in Leeds reported a 25% increase in operational efficiency after implementing automation tools to streamline manual processes, saving the equivalent of 12 full-time employees and a further quarter of a million pounds in associated costs.

SUPPORTING PERFORMANCE AND PROFESSIONAL DEVELOPMENT

Improving staff performance and satisfaction requires more than generic training programs; it demands a tailored, data-driven approach. And there is now technology that can make this happen.

An Ambulance Sector Workforce Report found that

68%

of staff who received personalised feedback and coaching reported increased job satisfaction and confidence in their roles.

Advanced analytics tools now provide ambulance services with the insights needed to improve individual and team performance, creating a more resilient workforce.

By analysing call performance data, ambulance services can identify specific strengths and gaps among call handlers. Rather than relying on blanket training approaches, these insights allow for targeted coaching that addresses individual areas of improvement. Staff benefit from personalised development, helping them build confidence and competence in their roles while improving the overall quality of service.

Automated quality assurance further enhances this process by ensuring consistent and objective evaluations of performance. By removing the time-consuming elements of manual review, standards can be maintained more efficiently while freeing up managers to focus on supporting their teams. Supervisors gain access to actionable insights that uncover performance trends and systemic challenges, enabling them to address issues promptly and optimise workflows for better outcomes.

Ultimately, when call handlers feel supported through tailored training and continuous feedback; skills improve, morale rises, and staff are better equipped to manage the pressures of their roles. Professional development isn't just an operational benefit; it's a powerful motivator that mitigates the current retention challenges in the sector.



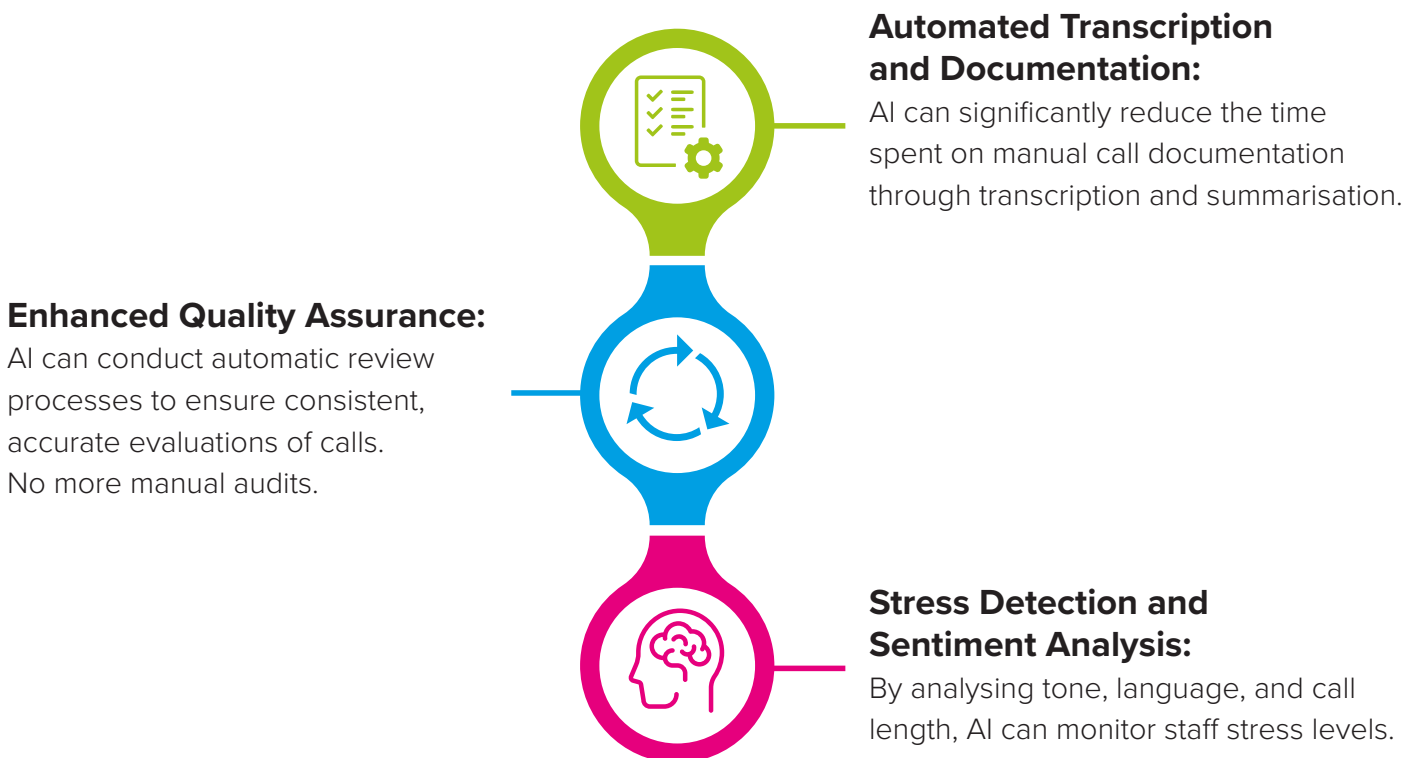
THE APPLICATIONS OF AI IN AMBULANCE

Artificial Intelligence is rapidly transforming the ambulance sector, addressing operational inefficiencies and enhancing support for staff working under immense pressure.

As the **BAPCO AI in Public Safety whitepaper** highlights:

“AI-driven solutions provide emergency services with the tools to automate processes, reduce response time, and protect frontline staff from escalating stress and burnout.”

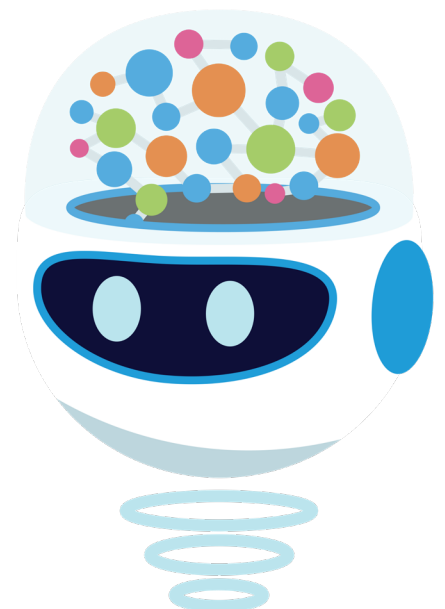
AI is one of the keys to success, and its not as hard-to-reach as many ambulances may believe. AI can be utilised in more micro ways for macro benefits, today. Take AI-powered technologies that use AI to enhance their performance rather than it being the lead purveyor of the service. That’s where the benefits can come from today.



AILSA: A STEPPING STONE TO RAPID AI ADOPTION

AI-powered solutions like AILSA are designed to deliver immediate and measurable benefits for ambulance services without the need to invest in complex AI solutions. By integrating seamlessly with existing call systems, AILSA provides instant reductions in call handling time by up to 75%, sentiment analysis and staff stress ratings, and automated QA of calls. It’s also possible to ask AILSA for insights and get instant knowledge drops after calls have taken place.

AILSA represents a practical, first step for ambulances to harness the power of AI, without investing in full AI solutions that self-control. The power of AI without the dangers, essentially. Addressing the immediate challenges with tools like this lay the foundations for longer-term transformation in emergency services.



MICRO DIGITAL TRANSFORMATION FOR MACRO BENEFITS

The idea of digital transformation scares many. That's because they perceive it as a drastic evolution that requires macro change. Really though, micro efficiency gains and performance improvements over time can be realised with the right technologies and upgrades.

Digital transformation should not be viewed solely as a huge operational upgrade; its true value lies in reducing stress, enabling meaningful work, and building a more resilient workforce with incremental steps. It should be the continuous enablement of process innovation and future-proofing staff skills - not replacing a current setup with a one-time upgrade. And there is, of course, much direct and indirect positive impact on staff today, but also much more over time.

By automating repetitive administrative tasks, such as post-call documentation and incident reporting, the cognitive load on call handlers is significantly reduced. This means staff spend less time consumed by process-heavy tasks and more time focused on work that makes a difference - be it supporting other distressed callers, escalating situations more effectively, or building on their expertise to improve service in the future. That's a quick shift that can be made today for gains now and in the future.

Empowering staff with actionable insights also plays a critical role in improving morale. Interaction analysis and personalised training enable call handlers to see where they excel, while also providing tailored team development opportunities for managers.

And with proactive stress detection, targeted steps can be taken to support staff before challenges escalate. When stress is addressed early, the outcome is clear: fewer resignations, improved team dynamics, and a more resilient workforce.

A 2024 Workforce Stress in Ambulance Services Report found that staff who felt supported by their organisation's tools and processes were far more likely to remain in their roles, highlighting the direct human impact of well-designed digital solutions for control rooms.



THE FUTURE IS DIGITALLY ENABLED AMBULANCES

Digital transformation does not require a radical overhaul to deliver meaningful results. In the ambulance sector, progress can start with small, targeted innovations that address immediate challenges, laying the foundation for broader, long-term change.

The adoption of intelligent tools like stress monitoring, automation of administrative tasks, and performance analytics represents a significant step towards a more sustainable and resilient workforce. By identifying and mitigating stress early, ambulance services can protect staff from burnout and turnover. By streamlining processes, they free teams from unnecessary burdens, enabling them to focus on delivering effective, high-value support during critical incidents. And by providing insights for professional growth, they give staff the tools to succeed and thrive in their roles.

The urgency to act is clear. With increasing pressure on ambulance services to perform at their best, staff retention has become a critical operational necessity. Addressing the root causes of stress and inefficiency today will pave the way for a workforce that is supported, motivated, and better equipped to meet the challenges of tomorrow.

A digitally enabled ambulance service is not a distant vision; it is an achievable goal, one that brings immediate benefits to staff and the communities they serve. By focusing on incremental change and building upon success, ambulance services can deliver tangible improvements that position them for a stronger, more sustainable future.

ABOUT LIQUID VOICE

Founded in 2004, Liquid Voice has grown to become one of the leading privately owned specialists in interaction capture and analytics with customers worldwide supported by our centres of excellence in the UK and New Zealand. Recently, they have become a BAPCO corporate member.

At the core of the solution suite is a set of smart analytics capabilities that enables customers to inspect, understand and analyse every interaction they capture through different data feeds.

Furthermore, the solution suite for the Public Safety market has become more comprehensive over the past decade, now covering Event Reconstruction, Automated QA, Stress Monitoring, and Sentiment Analysis.

United Kingdom

T: +44 (0)113 200 2020

E: sales@liquidvoice.co.uk

Asia Pacific

T: +64 (0)3 281 7558

E: sales@liquidvoice.co.nz

liquidvoice.com

