

The Great North Air Ambulance Service

Great North Air Ambulance Service - Headquarters

Inspection report

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This report describes our judgement of the quality of care at this service. It is based on a combination of what we found when we inspected, information from our ongoing monitoring of data about services and information given to us from the provider, patients, the public and other organisations.

Ratings

Overall rating for this location

Outstanding 

Are services safe?

Outstanding 

Are services effective?

Good 

Are services caring?

Good 

Are services responsive to people's needs?

Good 

Are services well-led?

Outstanding 

Summary of findings

Overall summary

The service was previously inspected in 2018; however, we did not rate the service at this time.

We rated it as outstanding overall because:

- The service had enough staff to care for patients and keep them safe. Staff had training in key skills, there was comprehensive systems to keep people safe taking into account current best practice. The whole team was engaged in reviewing and improving safety and safeguarding. Staff understood how to protect patients from abuse, and managed safety well. The service-controlled infection risk well. Staff assessed risks to patients, acted on them and kept good care records. Medicines were managed safely, stored correctly, and disposed of safely. The service managed safety incidents well and learned lessons from them.
- Staff provided a high standard of care and treatment and gave patients pain relief when they needed it. Managers monitored the effectiveness of the service and made sure staff were competent. Staff worked well together for the benefit of patients, supported them to make decisions about their care, and had access to comprehensive information.
- Staff treated patients with compassion and kindness, respected their privacy and dignity, took account of their individual needs, and helped them understand their conditions. People who use services were active partners in their care. Staff were fully committed to working in partnership with people. They provided emotional support to patients, families, and carers.
- The involvement of other organisations and the local community was integral to how services were planned and ensured that services met the needs of local people and the communities it served. It also worked with others in the wider system and local and national organisations to plan care. The service treated concerns and complaints seriously, investigated them and shared lessons learned with all staff, including those in partner organisations.
- Leadership, management, and governance of the organisation assured the delivery of high quality and person-centred care, supported learning and innovation, promoting an open and fair culture. Leaders ran services well using reliable information systems and supported staff to develop their skills. Staff understood the service's vision and values, and how to apply them in their work. Staff felt respected, supported, and valued. They were focused on the needs of patients receiving care. Staff were clear about their roles and accountabilities. The service engaged well with patients to plan and manage services and all staff were committed to continuous service improvement.

However:

- There was a service level agreement (SLA) in place with the department of blood transfusion with an NHS Foundation Trust in the region; however, this had not been reviewed and dated by both services.

Summary of findings

Our judgements about each of the main services

Service

Emergency and urgent care

Rating

Outstanding



Summary of each main service

The service had not been rated before. We rated it as outstanding because:

- The service had enough staff to care for patients and keep them safe. Staff had training in key skills, there was comprehensive systems to keep people safe taking into account current best practice. The whole team was engaged in reviewing and improving safety and safeguarding. Staff understood how to protect patients from abuse, and managed safety well. The service-controlled infection risk well. Staff assessed risks to patients, acted on them and kept good care records. Medicines were managed safely, stored correctly, and disposed of safely. The service managed safety incidents well and learned lessons from them.
- Staff provided a high standard of care and treatment and gave patients pain relief when they needed it. Managers monitored the effectiveness of the service and made sure staff were competent. Staff worked well together for the benefit of patients, supported them to make decisions about their care, and had access to comprehensive information.
- Staff treated patients with compassion and kindness, respected their privacy and dignity, took account of their individual needs, and helped them understand their conditions. They provided emotional support to patients, families, and carers.
- The involvement of other organisations and the local community was integral to how services were planned and ensured that services met the needs of local people and the communities it served. It also worked with others in the wider system and local and national organisations to plan care. The service treated concerns and complaints seriously, investigated them and shared lessons learned with all staff, including those in partner organisations.
- Leadership, management, and governance of the organisation assured the delivery of high quality and person-centred care, supported learning and innovation, promoting an open and fair culture.

Summary of findings

Leaders ran services well using reliable information systems and supported staff to develop their skills. Staff understood the service's vision and values, and how to apply them in their work. Staff felt respected, supported, and valued. They were focused on the needs of patients receiving care. Staff were clear about their roles and accountabilities. The service engaged well with patients to plan and manage services and all staff were committed to improving services continually.

However:

- There was a service level agreement (SLA) in place with the department of blood transfusion with an NHS Foundation trust in the region; however, this had not been reviewed and dated by both services.

Summary of findings

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Summary of this inspection

Background to Great North Air Ambulance Service - Headquarters

Great North Air Ambulance Service Headquarters is operated by The Great North Air Ambulance Service (GNAAS). The Great North Air Ambulance Service is a charity and provides emergency and urgent care for patients across Northern and North East England. A team of doctors and paramedics deliver medical care. Clinical staff travel by helicopter air ambulance or a rapid response vehicle (RRV).

The service is an independent ambulance with a registered headquarters in the Tees Valley area and a base in Cumbria.

The service is registered for the following regulated activities.

- Treatment of disease, disorder, or injury
- Transport services, triage, and medical advice provided remotely
- Diagnostic or screening procedures
- Surgical procedures

The service primarily serves the communities of Northern and North East England and covers an area of approximately 8,000 square miles. This includes from North Yorkshire, to the Scottish Borders, and the Irish Sea on the Cumbrian West coast. The charity is home to three helicopters and four rapid response vehicles

The Great North Air Ambulance Service has previously been inspected by the Care Quality Commission in March 2018, November 2013, December 2012, and December 2011. We found the service was meeting all the standards of quality and safety it was inspected against. The service has not previously been rated.

How we carried out this inspection

We undertook a comprehensive inspection; we inspected all five key lines of enquiry and rated this inspection.

- We looked at the quality of the environment and observed how staff were caring for patients
- We spoke with managers and senior management team for the service
- We spoke with 12 other members of staff including all grades of medical, allied health professionals
- We reviewed eight full sets of patient records
- We looked at a range of policies, procedures and other documents relating to the running of the service
- We inspected both sites at Langwathby, near Penrith, and Progress House in Eaglescliffe

After our inspection, we reviewed performance information about the service and information provided to us by the hospital

We interviewed key members of staff, medical staff and the senior management team who were responsible for leadership and oversight of the service. We spoke with seven members of staff.

Summary of this inspection

You can find information about how we carry out our inspections on our website: <https://www.cqc.org.uk/what-we-do/how-we-do-our-job/what-we-do-inspection>.

Outstanding practice

We found the following outstanding practice:

- The service was proactively engaged with initiatives to enhance patient care and develop and improve services. Staff were actively involved in developing, leading, and conducting pilot projects, research projects, audits, and teaching and training programmes. This included developing and facilitating acute training packages for example the Pre-hospital Emergency Medicine Crew Course (PHEMCC), developing training for the police and mountain rescue, and involvement with a pilot project to develop a jet suit to assist with remote rescue.
- The service had innovated across the specialty of pre-hospital care by expanding the service to hot hospital retrievals (Cumbria) and prolonged transfers (Isle of Man). This involved creating a bespoke transfer training package which included, arterial line, infusion pumps, and inotropic support.
- The service had commenced resuscitation and transfer training as new modules, designed in house. Resuscitation training had replaced the standard advanced life support training (ALS) with a nuanced approach that went beyond ALS whilst still incorporating the key principles.
- The service used an electronic software system which was developed and built by GNAAS. The system recorded clinical patient information providing audit, medicines management and consumables stock control. This software was now in use by multiple other air ambulances in the UK.
- The service had a web-based reporting system for incidents, known within the service as Adverse Events Management (AEM). Learning from AEM's had been put in place including the introduction of emergency action cards that were placed in medical bags to support the treatment of patients, systems introduced to ensure blood products could be safely used and changes to electronic monitoring equipment.
- The charity became one of the first emergency services in the UK to utilise software in its deployment decisions. Dispatchers had software that allowed them to access a mobile phone from anyone at the scene of an incident including those making the call to the emergency services or other services already at the scene. The software allowed sharing of location and videos enabling the service to respond to increasing patient risk.
- The Great North Air Ambulance designed and built a bag system allowing the carriage of monitoring systems and ventilator in a bespoke bag that could be used to move this vital piece equipment to remote areas. The bespoke bag could be used in the aircraft and the back of ambulances.
- The service had invested in a single solution software system. This was compliant with the incoming Patient Safety Incident Response Framework (PSIRF) to provide a single system solution for incident management, risk, board assurance, compliance checks and project management. The software provided real time CAS/MHRA alerting and National Institute for Health and Care Excellence (NICE) updates, along with Care Quality Commission key lines of enquiry (KLOE) framework and updates.

Areas for improvement

Action the service **MUST** take is necessary to comply with its legal obligations.

Action a provider **SHOULD** take is because it was not doing something required by a regulation but it would be disproportionate to find a breach of the regulation overall, to prevent it failing to comply with legal requirements in future, or to improve services.

Summary of this inspection






Action the service SHOULD take to improve:

- The service should ensure that the service level agreement (SLA) with the department of blood transfusion at the local NHS foundation trust is reviewed and in date.

Our findings

Overview of ratings

Our ratings for this location are:

	Safe	Effective	Caring	Responsive	Well-led	Overall
Emergency and urgent care	 Outstanding	Good	Good	Good	 Outstanding	 Outstanding
Overall	 Outstanding	Good	Good	Good	 Outstanding	 Outstanding

Outstanding



Emergency and urgent care

Safe	Outstanding
Effective	Good
Caring	Good
Responsive	Good
Well-led	Outstanding

Are Emergency and urgent care safe?

Outstanding



The service had not been rated before. We rated safe as outstanding.

Mandatory training

The service provided mandatory training in key skills including the highest level of life support training to all staff. Managers monitored and reported on compliance with training rates, ensuring there were plans in place to ensure everyone completed it.

The mandatory training was comprehensive and met the needs of patients and staff. The service had effective systems to monitor staff compliance with mandatory training. Staff received up-to-date statutory and mandatory training across 22 different areas. At the time of the inspection, mandatory training compliance for operational staff was 98% against a target of 95%.

Staff received training on a range of topics, including but not limited to life support, moving and handling, infection control, safeguarding children and adults, and equality and diversity. Training also included specialist topics such as 'blood on board' training.

Clinical staff completed training on recognising and responding to patients with mental health needs, learning disabilities, autism, and dementia.

Mandatory training compliance was monitored, and staff were alerted staff when they needed to update their training.

Mandatory training compliance was discussed at daily clinical briefs, information in the brief was specific to the staff on duty that day. All staff we spoke with clearly knew what they had left to complete and by when. Where staff also worked in other NHS organisations mandatory training completion could be shared across the service.

The service carried out life support training in practical simulations. Staff and managers told us they did this as standardised life support training did not meet their needs due to the specialist nature of the work they carried out. Staff reported they felt confident in performing resuscitation and had standard operating procedures for resuscitation that were up to date with resuscitation council guidance.



Emergency and urgent care

The service had commenced resuscitation and transfer training as new modules, designed in house. Resuscitation training had replaced the standard advanced life support (ALS) training with a nuanced approach that went beyond ALS whilst still incorporating the key principles. GNAAS had instigated an Enhanced Pre-Hospital Resuscitation course. The enhanced pre hospital resuscitation course aimed to build on and enhance the practice of pre-hospital resuscitation for adult patients. The course covered the pre-hospital approach to resuscitation, including, using the pit crew model and making the most of the available skill mix; looking beyond the Advanced Life Support (ALS) guidelines to tailor care to the patient; the role of ultrasound in cardiac arrest, and post return of spontaneous circulation (ROSC) management.

Transfer training was one of the elements the service was building to deliver safe hospital to hospital patient movements and was being currently rolled out to all staff on an individual or small group basis. New staff and staff in training had not completed this training to date; however, there were plans in place to address this.

Safeguarding

There were comprehensive systems to keep people safe. The whole team was engaged in reviewing and improving safety and safeguarding. Staff understood how to protect patients from abuse and the service worked well with other agencies to do so. Staff had training on how to recognise and report abuse and they knew how to apply it.

There were systems and processes in place to keep people safe and safeguarded from abuse. The service had standard operating procedures (SOP) for safeguarding adults and children, both were in date and had review dates listed. The policies clearly defined the roles and responsibilities of staff relating to safeguarding and the reporting procedures for the three NHS ambulance providers the service worked with. A clear flowchart was also available for crew to follow.

All clinical staff were trained to level three for children and level two for adults. Pilots working for the service were subcontracted from an external specialist aviation company and did not have any contact with patients, however they completed level two adults and children training. At the time of the inspection, clinical staff compliance to safeguarding training was 100% for both adults and children with 100% compliance also achieved for across adults and children within pilots.

All staff we spoke to could articulate when they would raise concerns and were able to provide recent examples of when they had done so.

Effective systems were in place to report concerns with the service using their online incident reporting system, referrals to local safeguarding teams were done through the local commissioned NHS ambulance trusts. For the period June 2021 to June 2022 the service had made 27 referrals through local NHS ambulance services.

The service worked under local NHS ambulance trusts safeguarding processes and referred using the safeguarding named host professionals with access to level four training. All referrals were sent via the NHS directly.

The named safeguarding lead was the head of quality at GNAAS who was trained to Level 2 Adults and Level 3 Children and was the service liaison with the host named professionals. This was in line with intercollegiate guidance for adult safeguarding (2018).

The safeguarding lead for the service sat on the safeguarding steering group at a local NHS ambulance trust safeguarding group and concerns logged were reviewed as part of the monthly clinical review panel.



Emergency and urgent care

Cleanliness, infection control and hygiene

The service-controlled infection risk well. Staff used equipment and control measures to protect patients, themselves, and others from infection. They kept equipment and the premises visibly clean.

All areas were clean and had suitable furnishings which were clean and well-maintained. At Eaglescliffe, cleaning of non-operational areas was undertaken by an external company. This was monitored through a monthly audit, overall compliance for the two months prior to inspection was above 95% with no immediate action needed in any areas. At Langwathby, cleaning of the premises formed part of daily and weekly tasks and was the responsibility of all staff based there.

A senior member of the team was the lead for infection prevention control within the service and were working to meet new national requirements around the requirements for an external expert within the area.

The service had a weekly programme of checking vehicle roadworthiness and cleaning which was recorded on an operational support sheet. The sheets were checked and audited by the heads of operations. Records we reviewed showed 100% compliance across all relevant areas.

The aircraft were cleaned by staff on duty after each time it had been used. Deep cleaning occurred weekly and appropriate equipment and solutions were available for staff to undertake this. If patients had been carried on the aircraft a chemical demisting was undertaken by the pilot.

Rapid Response Vehicles (RRV's) were not used to transport patients; however, equipment to clean them after use was available.

All transport we inspected had secure clinical waste bags onboard to prevent the contents being spilled.

The service had processes in place to ensure safe handling of cleaning products, clean and dirty utility rooms were locked within a secure building with swipe access. There were notices displayed to explain to staff as to how to dispose of various kinds of waste safely.

All staff received training in infection prevention and control as part of the mandatory training. At the time of the inspection overall compliance was 100%.

Staff told us standard operating procedures were in place that covered all aspects of cleaning, including the use of cleaning solutions and equipment. We saw evidence cleaning material including cloths were colour coded for use.

The service managed clinical waste in line with national guidance. We saw clinical waste bins were stored safely and locked. The service had a service level agreement in place with an external provider for the disposal of clinical waste.

Staff followed infection control principles including the use of personal protective equipment (PPE). PPE bags were stored on the aircraft and in the vehicles for staff to use. The service was able to undertake its own fit testing of respirator masks for staff and the aircraft was partitioned to help protect the non-clinical crew on board.



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There were reliable systems to protect people from infections. Hand hygiene was prioritised and maintained to ensure patients were protected from the risk of infection. Hand sanitisers were readily available, and staff told us they used them before and after every episode of direct patient contact or care. This was in line with the National Institute for Health and Care Excellence (NICE) guideline QS61 Statement 3 (2014), Infection prevention and control - hand decontamination.

Due to the types of jobs staff attended, crews were not always able to get specific information about infection and hygiene risks associated with individual patients, however where information was available to local NHS ambulance, this was available to the dispatchers who would share all relevant information with the crew.

The service had infectious disease packs available to crew that contained additional equipment to help prevent spread of disease.

Uniforms and flight suits were laundered onsite and the linen used on stretchers was transferred with the patient or disposed of.

Environment and equipment

The design, maintenance and use of facilities, premises and equipment kept people safe. Staff were trained to use them. Staff managed clinical waste well. Innovation was encouraged to achieve sustained improvements by providing clinical equipment.

The facilities and premises were appropriate for the services that were planned and delivered. The base for the aircraft was clean with suitable storage areas for the equipment used. The hanger for the aircraft was purpose built for aircraft storage and they were able to fuel the aircraft after each mission at the base.

The environment of the two stations we inspected was properly designed, maintained, and well ordered. Managers we spoke with could explain the process surrounding transport servicing and repair.

The service operated two staffed bases at Langwathby, near Penrith, and Progress House in Eaglescliffe, covering an area of around 8,000 square miles.

The recently refurbished base on the outskirts of Langwathby, near Penrith, provided accommodation for the team in the North-West.

The base at Progress house in Eaglescliffe in the North-East featured large hangar space and modern office facilities housing the critical care team as well as the charity's fundraising, lottery and administration teams. The emergency response across the whole region was coordinated from the air desk at Progress House in Eaglescliffe.

The service had four cars available for use as a rapid response vehicle based at Progress House and two cars based at Langwathby. Both locations had a helicopter. The service owned and maintained the vehicles, the helicopters were leased and maintained by an external specialist aviation company. All vehicles had been serviced within the last year and had a current ministry of transport (MOT) test certificate in place. Vehicle keys were securely stored.

Equipment on the aircraft and vehicles underwent readiness checks daily and were completed by two members of crew using a standard proforma, both crew members signed to say this had been completed. Checks included equipment



Emergency and urgent care

bags, electronic medical devices such as defibrillators and ventilators and emergency medications. PPE equipment, cleanliness, safety equipment for crew and communication devices were also checked as part of the daily process. At the time of the inspection checks were undertaken using paper forms; however, systems were in place to move to electronic recording starting the following month.

In addition to daily readiness checks a rolling programme of weekly checks was in place to review and monitor equipment. On the day of the inspection the crew were checking personal access pouches. Failure of equipment was reported by staff and trends were monitored internally, where required additional staff training was provided or changes to equipment undertaken.

Equipment was serviced in line with the manufacturer guidance and processes were in place to monitor this.

The Civil Aviation Authority (CAA) safety test and service due dates were recorded electronically. Alerts were generated and sent to base managers to prompt them to arrange servicing or renew vehicle equipment.

The service ensured their aircraft were suitably serviced and checked in line with the Civil Aviation Authority regulations. The Civil Aviation Authority regulates all aspects of aviation. We looked at audit records for the two helicopters in use at both sites and found they both had a completed certificate from the Civil Aviation Authority showing compliance.

All staff we spoke to told us they had enough equipment to undertake their roles and consumables we checked were all in date.

GNAAS designed and built a bag system allowing the carriage of monitoring systems and ventilator in a bespoke bag that could be used to move this vital piece of equipment to remote areas. The bespoke bag could be used in the aircraft and the back of ambulances.

The charity's on-board ventilators, one of the most crucial pieces of equipment when dealing with major trauma, had been upgraded. The new ventilators allowed more precise control, giving more options when treating patients with complex clinical requirements.

GNAAS carried ultrasound scanners on board helicopters and cars. The scanners (roughly the size of a mobile phone) gave a clearer picture of internal injuries or complications.

The service had introduced the use of body-worn video cameras for learning and debriefing. Protocols for use had been developed with the Surveillance Camera Commissioner to ensure patient dignity and confidentiality was protected. Staff ensured that consent was sought and where this was not possible decisions were made in patients' best interests.

Staff had access to equipment to provide protection when working in adverse conditions and circumstances. For example, stab vests were kept in the cars and aircrafts. Each day checks were undertaken to ensure that the vests were the correct size for the person on shift. Staff also had access to hard hats, gloves, boots, aprons, and goggles.

Medical gasses were stored securely in a locked cage when not in the aircraft or vehicle. Within the aircraft oxygen was secured, in vehicles it was stored in the boot which was caged.

Staff were trained on all the equipment used by the service to ensure they were competent to use it.

Clean and utility areas visited were clean and free from clutter, equipment was stored off the floor.



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Assessing and responding to patient risk

The service had a proactive approach to anticipating and managing risk. Staff completed risk assessments for each patient swiftly. They removed or minimised risks and updated the assessments. Staff identified and quickly acted upon patients at risk of deterioration.

The service had standard operating procedures for the treatment of specific illness and injuries, this ensured all staff had a clear process to follow. All standard operating procedures were available to crews via their handheld tablets. The tablets updated every time they were connected to the internet which was daily. Staff reported they could also contact the air desk and have the procedures read to them if needed.

All calls were attended to by a helicopter medical emergency service (HEMS) paramedic and senior level doctor, this allowed for advanced treatments to be administered to patients at the scene. Aircrafts and cars carried specialist equipment allowing crews to provide enhanced levels of monitoring and support.

Staff used a nationally recognised tool to identify deteriorating patients and escalated them appropriately. The Glasgow coma score (GCS) was one tool used by staff to monitor patients that were deteriorating. The GCS is an assessment of consciousness using a set of three quick assessments that were standardised nationally. This allowed all staff from the service and any partner services at the scene to understand the patient's condition and the significance of any deterioration. Records we looked at showed staff had used the tool in line with national guidance. All staff we spoke to were confident in identifying deteriorating patients.

Patients were monitored during their treatment and transfer using standard observations (for example, blood pressure and pulse). Staff shared key information when handing over patient care to others. Patient record forms were completed on paper and electronically, paper copies were handed over to the receiving service.

Staff received conflict resolution training as part of their mandatory training and regularly practised scenario-based training when not on active missions which allowed them to encounter and plan for unexpected risks in a safe learning environment. At the time of this inspection conflict resolution training evidenced a compliance rate of 100% for all staff.

Staff assessed, identified, and responded to challenging patient behaviour in line with the service policy. The GNAAS crews often attended patients with severe injuries following major trauma. The body's response to trauma, in some cases, can affect a patient's behaviour. For example, a significant head injury can mean that patients become more irritable and aggressive. Staff we spoke with told us the importance of being able to manage this behaviour to avoid further injury to the patient but also to enable the team to quickly assess and treat the patient.

In 2018, the charity became one of the first emergency services in the UK to utilise software in its deployment decisions. Dispatchers had software that allowed them to access a mobile phone from anyone at the scene of an incident including those making the call to the emergency services or other services already at the scene. The software allowed sharing of location and videos which enabled the service to respond to increasing patient risk.

The system was regularly used by the team allowing them to make more informed decisions before deploying the aircraft to an incident.

The service had senior paramedic and consultant on call cover available at all times for crew to escalate clinical concerns and provide support. Medical staff had access to a second decision maker for incidents requiring certain procedures, this was in line with best practice guidance.



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The service worked with other emergency services across the region as part of the response to major incidents in the area. Policies and procedures were in place to support this. Senior staff told us the service was working nationally to redefine how major incidents were responded to.

Staffing

The service had enough staff with the right qualifications, skills, training, and experience to keep patients safe from avoidable harm and to provide the right care and treatment. They had enough paramedics, doctors, and pilots to operate safely. Managers regularly reviewed and adjusted staffing levels and skill mix and gave bank and agency staff a full induction.

The service employed 15 paramedics and had 23 active medical staff covering the rota with an additional six medical staff in the process of joining the team. All paramedics were employed directly by service. Medical staff had historically worked through different agreements however the majority of these were also now directly employed. No bank or agency staff were used.

Two air desk dispatchers had recently been added to the team and worked covering day shifts seven days a week at Langwathby. The dispatchers were able to dispatch aircraft or vehicles at both sites; however, Langwathby had their own air desk that was monitored by crew based there.

The service placed an emphasis on ensuring staff were competent at carrying out dual roles. The service employed suitably trained paramedics who undertook dual roles as clinical managers. The use of dual roles meant the service had access to competent staff at short notice to cover shifts.

Service data for Prospect house showed all shifts for the month of June were covered by paramedics. Only two shifts did not have medical cover due to sickness. Additional paramedics were part of the rota in the absence of medical staff.

A team of pilots employed by an external aviation company operated the helicopters. A pilot crewed each flight with support from the clinical staff who had received specific Pre-Hospital Emergency Medicine (PHEM) training to enable them to perform navigational roles on the aircraft and assess safe landing sites.

All staff had a full induction that prepared them to support safe care for patients.

Records

The service had systems to manage and share information needed to deliver effective care and treatment. Innovative systems supported accurate and personalised information sharing. Staff kept detailed records of patients' care and treatment. Records were clear, up to date, stored securely and easily available to all staff providing care.

Staff used specially designed electronic patient report forms (PRFs) to record patients' clinical details. At the time of the inspection both paper and electronic records were used, resulting in some duplication. Plans were in place to move to electronic records with the service working with receiving hospitals to allow information to be shared.

The electronic system, which was developed and built by GNAAS. The service realised that 'off the shelf' products for recording patient clinical information were not meeting their needs in respect of audit, medicines management and



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consumables stock control. The service invested in the development and production of this bespoke system. The software was able to show the location of the incident, which hospital was closest, assist with decision making, inform the service which aircraft to send and provided a patient report form. This electronic system was now in use by multiple other air ambulances in the UK.

Patient individual care records were accurate, complete, legible and both formats of paper and electronic records were stored securely. Staff completed the PRF and provided a copy to receiving hospitals at the time of admission.

Copies of recent PRFs we reviewed showed that staff completed them fully and they contained information pertinent to the episode of patient care.

Staff did not routinely have access to advanced notification of do not attempt cardiopulmonary resuscitation (DNACPR) or special notes unless there was information at the scene. This was due to the nature of the emergency work and often treating patients away from their homes. Should any details become available the dispatcher would notify the crew with any information available.

Records were reviewed at the service's clinical standards panel and feedback both positive and negative disseminated with staff. We saw evidence that general improvements to be made regarding record keeping were added to daily briefing sessions.

Medicines

The service used systems and processes to safely prescribe, administer, record and store medicines. Compliance with medicines policy and procedure was routinely monitored and action plans implemented promptly.

There were processes in place for the safe management of medicines. There were policies in place, which provided guidance on the ordering, storing, recording, administration, and disposal of controlled and non-controlled drugs. There were standard operating procedures for the use of specific medicines used in the service. Standard operating procedures were mapped against Joint Royal Colleges Ambulance Liaison Committee (JRCALC) and National Institute for Health and Care Excellence (NICE) protocols. During the daily briefing, a standard operating procedure for a medicine was reviewed each day to ensure staff knowledge remained up to date.

The Great North Air Ambulance Service (GNAAS) operated two air ambulances based at Progress House (Teesside) and Langwathby (Cumbria). The range of critical care interventions undertaken by the service required them to hold and administer controlled medications. The service held a Home Office controlled drugs license to facilitate this and the Head of Clinical Services was the license holder.

The Teesside base was at a purpose-built facility at Progress House (Eaglescliffe). The site was surrounded by security fencing with onsite 24-hour security and CCTV throughout. Access to the buildings was via electronic security fob or through the charity's reception which was only open during office hours. Operational stores were in the aircraft hangar where unsupervised access was only granted to the operational team.

Controlled medications were stored in a safe secured to an internal wall. The safe key was held separately within the main building within its own safe that had a keypad entry. Only registered healthcare professionals had access to the safe code. A daily record was held detailing the clinician responsible for the safe key each day. Controlled medications were only accessed when two clinicians were present for stock checks, restocking or receipt of an order. A similar secure system was in place for controlled medication at Langwathby. Controlled medications were checked daily.



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GNAAS used a digital approach for record keeping for non-controlled medication. For controlled drugs (CD's) paper CD books and digital records ran concurrently. The systems in place which were designed by the service allowed them to trace an individual batch back to a single patient.

The service had policies and procedures in place for the management of controlled and non-controlled drugs. Processes were in place to maintain the safety of medication whilst on board aircrafts and in vehicles. The service utilised prescription only medicines (POM's) and general sales list medicines.

Minimum and maximum levels of stocks were detailed in the SOP and electronic systems were in place to support monitoring of levels and ordering. A CD stock check was undertaken at both bases every 24 hours. Actual stock levels were checked against paper and digital records. Any discrepancies could be primarily resolved by the clinicians undertaking the stock check by completing an adverse event management record and escalating to the clinical directorate.

All controlled medications received, distributed, administered, or destroyed were witnessed by two members of operational clinical team. All registers, books, requisitions, and orders were stored for a period of two years from the date on which the last entry was made.

Prior to patient administration, controlled medications were cross-checked by two clinicians who ensured correct drug, presentation, dosage, and the expiry date. The administration was recorded in the controlled medications record book on return to base with the date, time, patient name, PRF number, quantity given/wasted, two signatures and a running total.

Some medicines were stored in a fridge to maintain them at the correct temperature. The fridge maximum and minimum temperature was checked daily by the operational crew. A record of the temperatures was kept. We reviewed the temperatures recorded in July 2022 and saw that they were within the correct range.

We asked about actions taken when fridge temperature exceeded the recommended guidance. The base manager told us that they had sought advice about what actions would need to be taken for each medicine based on the manufacturer's guidance. They also investigated the causes of any discrepancies in temperature reading and provided guidance to staff to reduce the likelihood of reoccurrence.

Medical gases were stored safely in accordance with national guidance, cylinders were stored within a locked cage which was situated in the main part of the aircraft hangar and well ventilated.

Robust systems were in place for the destruction, loss, or theft of medications.

Supplies of red blood cells and fresh frozen plasma products were delivered to a key coded, locked and temperature-maintained box on site. These products were either used or returned by motorbike courier in a timely manner to ensure that the products could still be used elsewhere. The service had a service level agreement (SLA) with the department of blood transfusion with an NHS Foundation Trust in the region. The SLA review date had expired (July 2022).

Medicines management and stock control was available online using the bespoke electronic system allowing the service to trace an individual batch of medicine back to a single patient. Records we reviewed showed 100% completion rate for stock check control.



Emergency and urgent care

The software was designed to show the medicines in stock in each air base. All medications had expiry dates that are logged on the system. The software highlighted when a particular medicine was running low or when a medicine was about to go out of date.

Incidents

The service managed patient safety incidents well. Staff recognised and reported incidents and near misses and reported them appropriately. Managers investigated incidents and shared lessons learned with the whole team, the wider service and partner organisations. When things went wrong, staff apologised and gave patients honest information and suitable support. Managers ensured that actions from patient safety alerts were implemented and monitored.

The service had a comprehensive incident reporting and investigation standard operating procedure. The service had a web-based reporting system for incidents, known within the service as Adverse Events Management (AEM).

For the period January 2021 to December 2021 a total of 133 AEM's were reported. Fifteen of these were related to patient safety, nine of which were classified as low risk, one medium risk and five were classed as a near miss.

Managers shared learning with their staff. Learning from the AEM's had been put in place including the introduction of emergency action cards that were placed in medical bags to support the treatment of patients, systems introduced to ensure blood products could be safely used and changes to electronic monitoring equipment.

Staff knew what incidents to report and how to report them.

Staff understood the duty of candour. They were open and transparent and gave patients and families a full explanation if and when things went wrong. Openness and transparency about safety was encouraged. Staff described the principles and their responsibilities relating to duty of candour, Regulation 20 of the Health and Social Care Act 2008. The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of 'certain notifiable safety incidents' and provide them with reasonable support. At the time of this inspection training compliance for all staff evidenced 100% compliance.

Staff received feedback from investigation of incidents, both internal and external to the service. Staff told us how the service acquired new equipment based on feedback from staff, audit, research, and evidence. For example, we saw that following staff feedback the service had purchased colour coded syringes. These were intended for use during the night to increase safety and reduce the risk of administration of an incorrect dose at times where there was a possibility that visibility could be reduced.

Staff met to discuss the feedback and look at improvements to patient care. AEM's were discussed at monthly clinical standards panels and directorate meetings and data was included as part of monthly quality data that was visible for all staff to see.

Managers investigated incidents thoroughly.

Patient safety alerts were introduced over and above the team read system in May 2020. They were managed by the head of clinical services.



Emergency and urgent care

Patient safety issues were identified through the Central Alerting System (CAS) and the Medicines and Healthcare products Regulatory Agency (MHRA). This was monitored by the head of clinical services and head of operations. They could also be identified by the clinical standards panel and the clinical directorate.

During 2021 four Patient Safety Alerts (PSA) were issued. One (Ephedrine change of location) resulted in change of practice, the remainder had been for staff awareness and education.

The service was in the process of introducing a dynamic and live update system of CAS, MRHA and Care Quality Commission (CQC). This incorporated the new Patient Safety Incident Response Framework (PSIRF).

The clinical standards panel (CSP) continued to operate throughout the COVID-19 pandemic. Initially panel meetings had taken place on Teams due to infection risk and management; however, face to face meetings had re commenced. In 2022 the service had the ability to request post-mortem results through the pathology department via an NHS Foundation Trust in the region.

The Panel had not identified any significant patient safety related incidents.

There was evidence to support GNAAS had robust patient safety systems in place to identify specific failings quickly to ensure safe and effective care was given to patients. A review was undertaken in 2021 surrounding alleged incorrect triage. The incident was investigated by the head of clinical services which included reviewing GNAAS documentation and requesting statements from the crew involved. The outcome of the investigation identified minor learning points. Immediate learning was instigated with additional training and support implemented.

Operational quality assurance was undertaken in three phases, daily, weekly, and monthly. The purpose of this was to respond quickly to items of issues that had occurred, provide regular and consistent feedback to the team, and ensure GNAAS was working to the highest standards.

Daily incident quality audit was undertaken by the system coordinator. Data was gathered in three fields regarding tasking, clinical and alerting.

The tasking objective was to understand what effective tasking looked like, and to measure it against outcomes to be further developed. This was to ensure missed cases and potential delays to operations were within guidance following any investigation required.

All non-compliant incidents, true missed case and avoidable delays were reported either directly to operation department or to the head of quality.

The alerting objective was to provide immediate awareness of any incidents that required attention and to safety net crews by ensuring all relevant logs had been completed.

Weekly quality audit meetings were held by the head of quality with system coordinator and director of operations in attendance, along with available heads of the medical directorate.

Major Incidents

Working with the NHS and fellow emergency services, GNAAS had become an important part of the region's major incident response.



Emergency and urgent care

The service had a major incident response plan which all staff could access. There were laminated action cards available to provide staff with advice about roles and responsibilities in the event of a major incident.

Records showed that all paramedics and doctors had completed major incident training.

Medical staff told us that they were working with NHS England to improve the enhanced response to major incidents. Staff told us that they had been involved with introducing a national daily air ambulance register. This allowed the National Ambulance Resilience Unit to immediately see what resources were available in the event of a major incident.

Staff told us that they had a formal arrangement with one local NHS ambulance service for responding to major incidents, and that they offered help to other NHS ambulance services as needed.

Are Emergency and urgent care effective?

Good



The service had not been rated before. We rated it as good.

Evidence-based care and treatment

There was a truly holistic approach to assessing, planning, and delivering care and treatment to people who used the service. There was a safe use of innovative and pioneering approaches to care. New evidence-based techniques and technologies were used to support the delivery of high-quality care. The service provided care and treatment based on national guidance and evidence-based practice. Managers checked to make sure staff followed guidance.

Staff followed up-to-date policies to plan and deliver high quality care according to best practice and national guidance.

People's care and treatment was planned and delivered in line with current evidence-based guidance, standards, best practice, and legislation. The service had a broad range of clinical guidelines based on National Institute for Health and Care Excellence (NICE) or Joint Royal Colleges Ambulance Liaison Committee (JRCALC) good practice. The protocols were available to view in the airbase and online from mobile devices.

All standard operating procedures were aligned and linked to all relevant NICE and JRCALC guidelines.

Crews worked to service guidelines. The service provided various standard operating procedures (SOP) for differing treatments and procedures. We looked at four differing SOPs and these were up-to-date and had review dates. Clinical staff we spoke to knew about differing standard operating procedures and knew how to find them if they wanted to refresh themselves on information.

Clinical standard operating procedures were maintained by the clinical standards panel (CSP). One panel member had overall responsibility for SOPs. The contents were reviewed every three years on a rolling basis by the CSP. The SOP review process was a rolling programme with two or three SOPs reviewed by the clinical standards panel at monthly meetings.

Each day there was a medical briefing at each base where the clinical crew reviewed a clinical SOP.



Emergency and urgent care

We reviewed a selection of policies and clinical guidelines and saw that they were version controlled, were within review date and contained up to date referencing. The service provided various clinical guidelines for differing treatments and procedures. We reviewed a variety of clinical guidelines and saw all of these were up to date and had set review dates.

The service carried both packed red blood cells and fresh frozen plasma on all its assets. This enabled clinicians to give transfusions in the pre-hospital, emergency setting. There was a SOP in place which included indications for transfusion, patient advice leaflet, transfusion checklist, prescription sheet, annual competency training reminder, serious hazards of transfusion (SHOT) and an audit form.

Pain relief

Staff assessed and monitored patients regularly to see if they were in pain and gave pain relief in a timely way. They supported those unable to communicate using suitable assessment tools and gave additional pain relief to ease pain.

Staff assessed patients' pain using a recognised tool and gave pain relief in line with individual needs and best practice. Staff told us that they used a pain scale of one to ten, one being very little pain and ten being the worse pain possible. However, they also told us that most patients were unable to communicate their pain due to being seriously injured. Staff supported patients that were unable to communicate their pain levels. Staff assessed these patients by looking at the quality and nature of pain by assessing the type of injury, body language and physiological signs, for example, increased blood pressure, respiratory rate, and heart rate.

Crews held strong pain-relieving medicines that a standard ambulance was unable to offer. This ensured patients were as comfortable as possible.

Staff prescribed, administered, and recorded pain relief accurately. The eight patient records we looked at showed that patient pain was monitored, and medication was given to prevent patients being in pain. Patients received pain relief soon after it was identified they needed it, or they requested it.

Response times

Opportunities to participate in benchmarking, peer review, accreditation and research were proactively pursued.

The service recognised the need to monitor their service delivery. To achieve this they developed, monitored, and improved response times so that they could facilitate good outcomes for patients. They used the findings to make improvements. There are no nationally specified key performance indicators for air ambulance services.

The service had developed and monitored a number of clinical and non-clinical indicators. These included indicators such as helicopter launch time.

The computer system enabled the recording of key time points in each patient's journey. A computerised system logged when a call for the service was received. This record was subsequently kept up to date by staff calling into the control base.

Response times were monitored against key performance indicators. For example, there was a target of having the ambulance airborne in under seven minutes from receiving the request.



Emergency and urgent care

We reviewed the services operational quality data dashboard (June 2022) which evidenced aircraft take off responsiveness against the standard of seven minutes or less from accepting 999 call. The service compliance rate showed 85% compliance for aircraft lift times, seven minutes or less. There are no national standards relating to aircraft responsiveness.

Response targets were not set because safe departure, without additional pressure, took priority. The service monitored on-scene times and turnaround times, but crews were not pressured to meet a target. This was to ensure that teams carried out procedures and any critical intervention safely without being pressured by time. The data collected around response times was used purely as monitoring and learning.

Patient outcomes

All staff were actively engaged in activities to monitor and improve quality and outcomes. They used the findings to make improvements and achieved good outcomes for patients.

Patient outcome information was limited due to the nature of the service. Clinical staff would hand over a patient to a receiving service and would not always receive information about outcome.

We saw evidence to support the use of patient follow up and ongoing progress forms. Clinical staff disseminated the information to individual crew for learning purposes.

The service reviewed clinical performance against a number of quality performance indicators. Figures were reviewed monthly at the clinical standards panel and trends were reviewed over the year. The panel reviewed every patient record form to check whether outcomes could have been improved.

The service used a closed group patient network on Facebook, which allowed former patients to share their stories, and discuss a shared experience of care from GNAAS. This was monitored by clinical staff, enabling group members to support each other, and for signposting to professional help when required.

The service operated a hot retrieval service. A hot retrieval classification was when the GNAAS team activated to a hospital emergency department to rapidly move a patient whose clinical needs could not be met at the referring facility. The patient would require access to critical intervention or service at another hospital in order to save life or limb requiring ongoing treatment on route. The service had a SOP in place for this process.

Team members had innovated across the specialty of pre-hospital care by expanding the service to hot hospital retrievals (Cumbria) and prolonged transfers (Isle of Man). This had involved creating a bespoke transfer training package which included, arterial line, infusion pumps, and inotropic support.

Competent staff

The continuing development of staff skills, competence and knowledge was recognised as being integral to ensuring high quality care. Staff were proactively supported to acquire new skills and share best practice. Managers appraised staff's work performance and held supervision meetings with them to provide support and development.

Staff were experienced, qualified, and had the right skills and knowledge to meet the needs of patients.

Managers gave all new staff a full induction tailored to their role before they started work.



Emergency and urgent care

Training was actively encouraged and promoted by senior managers. Staff were passionate about continued learning in order to provide patients with high quality, evidence-based care. We saw that there was a comprehensive induction training package. Staff worked through a training booklet that took, on average, six months to complete. This covered aviation and clinical skills. There was a process to assess competency before staff were signed off to work as a full member of the team. This involved test and sample clinical scenarios. Staff acknowledged that induction training was supernumerary, staff were given opportunities to observe on shift with regular supported assessments and daily simulation training. Staff clarified they felt supported throughout the induction process.

Staff told us that they were supported and encouraged by senior managers to achieve postgraduate qualifications such as diplomas and master's qualifications relevant to their role. Staff were also encouraged to attend conferences and learning events and feedback learning to staff to share knowledge.

The service had two paramedics currently working towards a diploma in Immediate Care, with one staff member commencing a PhD. The service was instigating training for three paramedics to undertake the Fellowship in Immediate Care process.

In keeping with the Health and Care Professions Council (HCPC) requirements, paramedics completed continuous professional development (CPD) on every shift undertaking scenario-based training and SOP review and discussion. The compliance percentage for this was reported in the monthly operational quality report and was monitored on the daily simulation and monthly Pre-Hospital Emergency Anaesthesia (PHEA).

Managers supported staff to develop through, constructive appraisals of their work. There was a process for reviewing staff performance and learning needs. Doctors undertook appraisals with the medical director. We were told that paramedics undertook quarterly 'one to ones' with senior staff to monitor performance and identify learning needs. Staff told us that a performance analysis process was being introduced for paramedics. This would involve performance being assessed against clinical and operational standards and feedback from colleagues.

Managers identified any training needs their staff had and gave them the time and opportunity to develop their skills and knowledge.

Staff had the opportunity to discuss training needs with their line manager and were supported to develop their skills and knowledge.

The service was an accredited training unit for doctors undertaking specialist training in pre-hospital emergency medicine (PHEM). The service had a lead role in developing and facilitating the Pre-hospital Emergency Medicine Crew Course (PHEMCC).

GNAAS promoted continuous professional development and learning through several strategies:

- Regular operational clinical audit days
- Attendance at clinical standards panels
- Regular death and disability case reviews
- Teaching our various courses
- Prehospital Emergency Medical Crew Course
- Prehospital Emergency Anaesthetic Course
- Obstetric Emergencies Course
- Enhanced Pre-Hospital Resuscitation course



Emergency and urgent care

- Police Fire-arms medical training course
- Maintaining key performance clinical standards. This included horizon scanning latest evidence-based medicine.
- Annual audits
- Access to outside courses and conferences, clinicians had attended regional, national, and international conferences.
- Daily medical / trauma moulages
- Maintenance of clinical competency passport

GNAAS provided additional training to clinicians both internally and externally. The service welcomed clinicians from all over the world to training courses to benefit participants with the skills they need to thrive in the complex and challenging area of patient care.

There was a number of training courses including but not limited to: pre-hospital emergency medicine crew course (PHEMCC), pre-hospital emergency anaesthesia (PHEA), Obstetric emergency's, enhanced pre-hospital resuscitation, pre-hospital emergency medicine (PHEM).

GNAAS offered placements to University students studying BSC (Hons) paramedic practice to provide additional practice and learning to individuals in critical and trauma care.

The service also worked in partnership with Northumbria University on a variety of projects and training courses included the approval / accreditation for some components of training.

Multidisciplinary working

Staff, teams, and services were committed to working collaboratively and had found innovative and efficient ways to deliver more joined-up care to people who use services.

Members of the clinical and non-clinical teams worked effectively together. They maintained clear lines of communication to facilitate multi-disciplinary working.

The service was committed to working collaboratively and found efficient ways to deliver more joined-up care to people who used services. Staff recognised the need to respect the road crews they worked with and the need to act as support and guidance when on scene.

Clinical staff and pilots described good working relationships with clear lines of accountability and communication.

Staff assisted NHS ambulance teams during incidents with medical interventions.

Staff provided comprehensive patient handovers to health professionals at receiving organisations for example, detailed records of injuries, observations, treatments including medications, and safeguarding information if appropriate.



Emergency and urgent care

Consent, Mental Capacity Act and Deprivation of Liberty safeguards

Staff supported patients to make informed decisions about their care and treatment. They followed national guidance to gain patients' consent. They knew how to support patients who lacked capacity to make their own decisions or were experiencing mental ill health.

Staff understood the relevant consent and decision-making requirements of legislation and guidance. Staff had access to the consent to examination or treatment policy. This was in date and had a review date. The policy clearly described the procedure for obtaining consent and detailed what to do in the event staff could not gain consent. The policy made specific reference to children and young people, Deprivation of Liberty Safeguards (DoLS) and mental health. The policy reflected national professional guidance. For example, the Human Rights Act 1998 and the Mental Capacity Act.

Staff sought informed consent from patients prior to treatment. Staff respected patients' decisions about their care. For example, if a patient did not want to travel by air, they could arrange for a land transfer, where practical.

Staff clearly recorded consent in the patient's records.

Consent to care and treatment was obtained in line with legislation and guidance, including the Mental Capacity Act 2005 and the Children's Acts 1989 and 2004. All staff we spoke with were familiar with and could assess a child under the age of 16 for Gillick competence.

Gillick competence was used to determine that children under 16 could consent if they had sufficient understanding and intelligence to fully understand what was involved in a proposed treatment. This was the statutory process for assessing children under the age of 16 who were competent to make decisions about their own care and treatment.

People were supported to make decisions and the clinical crews sought verbal consent for treatment. When patients were conscious, staff discussed their treatment options with them. Staff and patients told us they clearly explained both the positives and negatives of any treatment or action. This enabled patients to make informed decisions.

Staff made best interest decisions for patients unable to make decisions due to lack of consciousness or lack of mental capacity in accordance with legislation. Staff said that it was not always possible to communicate all possible treatment options to the patient when making urgent decisions in emergency situations. Staff reported that, they always kept the patient informed about what was happening and obtained verbal consent wherever possible.

We saw that there were forms on board the vehicles for recording best interest decisions. Staff supported each other by discussing the best interest of the patient together. If family members were present, staff told us they involved them as much as possible.

Staff received training in the Mental Capacity Act (MCA) and Mental Health Act. At the time of our inspection, 100% staff had received this training. Staff understood their responsibilities in relation to consent and decision making according to legislation. The Head of Training was the lead for ensuring that staff were fully compliant with all training regarding the Mental Health Act and the Mental Capacity Act.

In the event of chemical restraint, this would be reviewed by the service's clinical standards panel and any external specialist advice sought.

As part of recent paramedic recruitment, the service had employed an individual who was a registered mental health nurse. The service planned for the mental health nurse to be the dedicated mental health lead for the service.



Emergency and urgent care

Are Emergency and urgent care caring?

Good



The service had not been rated before. We rated it as good.

Compassionate care

People were truly respected and valued as individuals. Feedback from people who had used the service and those who were close to them was continually positive about the way staff treat people. People thought that staff went the extra mile and the care they received exceeded their expectations. Staff were highly motivated and inspired to offer care that was kind and promoted people's dignity.

Staff were discreet and responsive when caring for patients. Staff took time to interact with patients and those close to them in a respectful and considerate way.

Staff showed an awareness of the importance of maintaining patients' privacy and dignity. For example, staff told us they ensured that patients were covered with blankets wherever possible.

All staff described additional measures that were taken to preserve patients' privacy and dignity. For example, asking police to cordon off areas and asking crowds to move back.

Maintaining a patient's dignity was paramount for all crews. The nature of the work was such that patient demographic was generally critically unwell or injured, and as such crew may be required to cut off clothes to perform lifesaving interventions or assessments. In these cases, crew used and recorded the use of blankets, to ensure privacy and dignity was maintained.

In order to improve privacy and maintain dignity the service developed systems to deliver care more effectively in the confined space of an ambulance. This included the use of a carry pack containing the patient monitor with a bag system that could hang off an ambulance chair, freeing up space.

Staff emphasised the need for talking with patients and relatives politely and using jargon free language.

Staff told us they frequently reunited with patients following an incident and had the opportunity to gather feedback and concerns. The service had not received any reported issues surrounding maintaining patient privacy and dignity.

To identify patients who had been cared for by the service and decide when might be an appropriate time to invite them to provide feedback, GNAAS were looking to develop a nurse champion role. The roll out of the initiative was expected to commence September 2022.

The service had instigated a GNAAS nurse champion role (GNC) to encourage patients to give feedback in real time. The GNC project aimed to invite more patients to give open and honest feedback about their experience, whilst they were still in hospital (but an appropriate time in their recovery) and hence at a time which was closer to the time of their GNAAS care.

This feedback was to be collected anonymously either online or using a paper questionnaire, and to feed into GNAAS operational management in order to review and further improve the service they provided.



Emergency and urgent care

GNAAS staff recognised in all aspects of healthcare, patient experience and feedback were invaluable in assessing and improving the care delivered and provided essential insight into how care was perceived. The service previously relied on patient feedback obtained through postal surveys, website contacts or base visits, however there were patients that the service did not hear from, and often the feedback they received could be several months after the event.

The service encouraged patients to become patient ambassadors in order to share their personal story. There was information to support the decision-making process with regard how this was managed, collated, and published.

Feedback from people who used the service, those who are close to them and stakeholders was continually positive about the way staff treated people. People thought that treatment was second to none, care they received exceeded their expectations. Patient feedback on the charity's website was overwhelmingly positive about the care that they had received.

We received feedback from a relative on the day of inspection who told us staff 'treated patients and relatives with respect, compassion and dignity'. Staff openly encouraged patients and relatives to visit the service and meet the staff involved in the care of a loved one following an accident. The patients relative had since become involved in the charity fund raising efforts and felt included as part of the team.

Emotional support

People's emotional and social needs were highly valued by staff and were embedded in their care and treatment. Staff provided emotional support to patients, families, and carers to minimise their distress.

Staff understood the emotional and social impact that a person's care, treatment, or condition had on their wellbeing and on those close to them. For example, they told us that if relatives were unable to travel on the air ambulance, they made efforts to ensure that relatives or carers were escorted by police to the correct hospital.

Patient feedback indicated that crews had responded in a compassionate and supportive manner. Staff described supporting injured patients and relatives during distressing events.

Staff described allocating one member of staff to speak with, comfort, and support carers and relatives where possible. Staff also described enlisting the help of other services such as the police and ambulance service where present. This was to support relatives, by comforting them and conveying them where it was not possible to convey them with the patient.

Understanding and involvement of patients and those close to them

People who use services were active partners in their care. Staff were fully committed to working in partnership with people. Staff always empowered people who use the service to have a voice and to realise their potential. Staff highly valued the patient's relatives and those close to them.

Staff supported and involved patients, families, and carers to understand their condition and make decisions about their care and treatment.

The service supported patients and relatives and had produced information sheets that provided hospital information that they could use for directions and telephone numbers.



Emergency and urgent care

They had produced a support document in the event of a patient death, detailing what happens when someone dies unexpectedly, emotional support with contact details for Cruse bereavement care and the Samaritans and how to register a death.

The service also encouraged and supported base visits, to enable patients and relatives to talk about their experiences and ask any questions they may have about the events or the care the service delivered.

The service used a closed group patient network on Facebook, which allowed former patients to share their stories, and discuss a shared experience of care from GNAAS. This was monitored by clinical staff, enabling group members to support each other, and for signposting to professional help when required.

In 2015 GNAAS began carrying blood and plasma on board their aircraft and overnight cars. This introduction allowed the critical care team to deliver transfusions at the scene of an incident, to the most seriously ill or injured patients giving them the best chance of survival.

This treatment was not previously possible outside of a hospital setting, it had now been used to treat 500 patients across the North East and Cumbria.

The pioneering blood on board scheme was a collaboration between an NHS Foundation trust in the region, GNAAS and volunteers from the Cumbria and Northumbria blood bikes and was devised by an army reservist, consultant in anaesthesia and pre hospital emergency medicine the NHS foundation trust and doctor at GNAAS.

To honour those that had received this treatment and celebrate reaching the 500-patient milestone, the collaborative team hosted a special reception at the local NHS trust for patients who had received blood and their loved ones.

The service submitted data to evidence patient feedback in June 2022. Data evidenced four base patient/relative visits had been completed. The service had received three positive patient feedback letters.

Are Emergency and urgent care responsive?

Good



The service had not been rated before. We rated it as good.

Service delivery to meet the needs of local people

The involvement of other organisations and the local community was integral to how services were planned and ensured that services met the needs of local people and the communities it served. It also worked with others in the wider system and local and national organisations to plan care.

GNAAS provided pre hospital emergency medicine and critical care to the people of the North of England, including Cumbria, Northumberland, Durham, and the Isle of Man. The service also offered support to Scotland, the Borders, Yorkshire and Lancashire when and if required.

The service employed an operational model of paramedics who were regulated by the Health and Care Professions Council (HCPC). The HCPC sets standards for professional education, training, and practice. The service also employed



Emergency and urgent care

registered doctors who were regulated by the General Medical Council (GMC). All staff had a wide range of specialities and experience. The team operated 365 days a year and aspired to mirror the service at night with a road-based car service. The service used rapid response road vehicles (RRV's) which were used in dangerous weather or diminished light and when mechanical failure or essential maintenance of the aircraft prevented them from flying.

RRV's were used to deliver the road-based helicopter emergency medical team (HEMS) and medical emergency response incident team (MERIT) service which was operational for declared major incidents or when a surgical team were required at an incident at the request of the crew.

The staffing levels, shift patterns and availability of vehicles were maintained in line with the NHS contract's requirements. The service had a good working relationship with the local NHS ambulance service and met with them regularly to review service provision to ensure needs were met. The service worked with other providers to support them to meet demand.

The service had instigated a GNAAS nurse champion role (GNC) to encourage patients to give feedback in real time. The GNC project aimed to invite more patients to give open and honest feedback about their experience, whilst they were still in hospital (but an appropriate time in their recovery) and hence at a time which was closer to the time of their GNAAS care.

This feedback was to be collected anonymously either online or using a paper questionnaire, and to feed into GNAAS operational management in order to review and further improve the service they provided.

Meeting people's individual needs

People's individual needs and preferences were central to the planning and delivery of tailored services. The service was inclusive and took account of patients' individual needs and preferences. The service made reasonable adjustments to help patients access services.

Staff were competent and understood the importance of considering the differing needs of patients. The service provided equality and diversity training as part of its mandatory training programme. The training focused on staff understanding the importance of equality and inclusion. At the time of our inspection, 97% of staff had completed this training.

Staff did not always know specific individual needs of patients when they were dispatched to emergency situations. The tasking NHS ambulance service would not always have detailed information. Clinical staff assessed patients according to individual need and provided the care that was relevant and met their needs

The service had access to a telephone translation service for patients whose first language was not English, although staff confirmed that this was rarely used due to the urgent nature of their work. The clinical crews were all experienced in the various forms of verbal and non-verbal communication. They would initially try to communicate using these methods or using friends and family if they were unable to communicate directly with the patient.

Staff used online or mobile translation applications on their tablet computers when and if required. Staff commented that communication in the helicopter was difficult due to noise. Each patient was supplied with headphones to overcome this problem.



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All staff told us it was important for them to know the patients usual cognitive and physical state, so they could assess them effectively. Staff described the importance of establishing a medical history as soon as possible so they could assess the patient's normal level of function. Staff told us they adjusted their interaction with patients to suit the needs of that patient, for example, they would change the way they spoke with patients who were hard of hearing, partially sighted and patients living with dementia.

The service aimed to provide access to all in emergency critical care situations. However, there were some safety-related exceptions. In the case of bariatric patients, the service could not always transport them by air due to weight restrictions. In these circumstances the patient travelled by road ambulance with the clinical crew providing care. The clinical crew performed dynamic risk assessments for all patients transferred and there were no specific exclusions.

The staff we spoke with commented that relatives and carers were actively encouraged to accompany individuals who may require additional support on flights, for example individuals with learning disabilities or children.

Support was available for patients experiencing a mental health crisis. The crew had access to community mental health teams via the NHS ambulance trust emergency operations centre. Staff told us they would also raise a safeguarding alert if they had a concern.

Staff considered people's needs when they visited the service. The service had several patients and relatives ask to visit the service to ask questions or offer their thanks. Patients and members of the public could give feedback in differing ways by using the service website, in person, by telephone and by post. Messages of appreciation were logged, and feedback provided to the relevant teams or team members.

Access and flow

People could access the service when they needed it and received the right care in a timely way. The service had developed innovative ways to improve the access people had to the service.

The service worked closely with NHS ambulance and hospital services to determine access and flow arrangements.

There were two operational air ambulances each day. A third air ambulance was available in the event that one aircraft became non-operational.

There were cars at each base that could be used to transport staff to the scene of incidents to provide treatment.

A designated member of staff at the service was responsible for identifying calls most appropriate for air ambulances. There was guidance as to the most appropriate calls for air ambulances and for dispatch arrangements.

The air ambulance was prioritised for admitting patients to hospital. This was because of the likely severity of the patient need, but also because NHS providers were conscious of freeing up the vehicle for other calls. Therefore, the air ambulance crew could both provide emergency care and treatment during transfers and be confident that their patients would be promptly treated at handover points.

The service worked efficiently as a team once they had identified HEMS dispatch criteria and identified the most suitable asset to attend (based on distance, type of location and skill level). This process meant that dispatch was carried out as quickly as possible to reduce any delays in the crews reaching the patient. GNAAS encouraged early dispatch of assets and then, if further information was received that critical care was no longer required, the asset would be stood down on route.



Emergency and urgent care

Learning from complaints and concerns

It was easy for people to give feedback and raise concerns about care received. There were active reviews of complaints and how they were managed and responded to, and improvements were made as a result across the services. The service treated concerns and complaints seriously, investigated them and shared lessons learned with all staff, including those in partner organisations.

The service had effective processes to investigate and learn from complaints. The service had an in-date complaints policy with a review date of January 2024. The policy clearly described the complaints procedure. The policy made specific reference to timelines and response deadlines to ensure.

Complaints could be made in person, by telephone, email, post, or on the website. The service website provided contact information for patients and the public on how to provide compliments or complaints about the service received. Complaints were recorded electronically with responsibility for investigating the complaint allocated to a specific member of the senior management team.

In dealing with complaints the provider recognised they had a duty to ensure that consent and confidentiality was not compromised during the complaints process unless there are professional or statutory obligations that make this necessary.

The service aimed to resolve any complaint within 14 working days, however if they needed to conduct a more in-depth investigation, then they aimed to provide a full response within **28 working days**.

Complaints were split into two categories, negative and positive. When someone approached the service with a complaint, it was logged electronically. The service had received no complaints in the last 12 months.

The service also recorded a non-compliance section, which was used to log and investigate items where a clinician had raised a potential issue. We reviewed three non-compliance concerns from April 2022 to July 2022. The concerns surrounded record keeping, decision to admit to a specific urgent and emergency unit and a reported serious incident notification. Non-compliance was concerns were investigated and actions and learning taken where necessary.

Are Emergency and urgent care well-led?



The service had not been rated before. We rated it as outstanding.

Leadership

Leaders had an inspiring shared purpose to deliver and motivate staff to succeed. Leaders at all levels demonstrated high levels of integrity, skills, and abilities to run the service. They understood and managed the priorities and issues the service faced. They were visible and approachable in the service for patients and staff. They supported staff to develop their skills and take on more senior roles.

The service had a clear leadership structure in place. A chief executive officer led the service and answered to a board of trustees. We found the service was well led.



Emergency and urgent care

The executive board consisted of clinical and non-clinical staff in roles including, but not limited to, medical director, chief medical officer, director of operations, clinical directors, head of quality, training leads, and head of operations

The leaders had the skills, knowledge and experience they needed for their roles. The majority of the management team were also registered paramedics who remained operationally active so that they understood the day to day workings of the front-line service.

The executive team demonstrated a high level of strategic planning, and people management skills, they were visible and approachable. Leaders were passionate about their roles and executed them with care and commitment to their staff. All staff could identify the different leads along with their roles and responsibilities. All staff had a visibly supportive and positive working relationship with the leadership.

During our inspection we observed compassionate, inclusive and effective leadership at all levels. Leaders demonstrated high levels of experience, capacity and capability needed to deliver excellent and sustainable care. The service invested in the development of leadership roles across the service, including succession planning to create new roles and respond to increased demands within the service.

Leaders were visible and approachable. All staff we spoke to spoke of how they could always go to their managers or the senior management team to discuss concerns or talk about improvement projects. All staff we spoke to reported that they had been visible, approachable and that they had spent time with people in all roles across the service.

Vision and Strategy

The service had a vision for what it wanted to achieve with a systematic approach and strategy to turn it into action, developed with all relevant stakeholders. Leaders and staff were fully focused on sustainability of services and aligned to local plans within the wider health economy.

The service had a mission statement and vision. The services mission was to provide a world class pre hospital care service for the people of the region. The vision was to extend and constantly seek to improve, emergency pre hospital and interhospital care.

The service values underpinning the vision were to; 'make the care and safety of patients its first concern', 'be responsible and accountable', 'ensure quality in in all we deliver', 'act with integrity', and 'strive to improve through education, training, research and audit'.

The service had a set of core values that were displayed on the service's staff intranet site. These stated that the care of patients was their first priority and that they would work with integrity, provide a high-quality service, ensure that they were responsible and accountable if anything went wrong, and that they would strive to continually improve the service. Staff were aware of the vision and values of the service and how they contributed to them.

The charities current vision, mission and values were under review. These were historically constructed by the chief executive officer and the Board; the service was engaging all staff in the process. An external expert was recruited to facilitate the process. The service vision was to produce a 'what', 'why' and 'how' type structure that was clear and informative. The service wanted all staff to feel a part of this process, and to then live and breathe the values that they defined together. This piece of work was commenced pre-COVID but due to remote working was paused during the pandemic.



Emergency and urgent care

Culture

There was a strong organisational commitment of equality and inclusion across the service. Staff were proud to work for the service and felt truly respected, supported, and valued. There was strong collaboration and team-working across the organisation, and all were focused on the needs of patients receiving care. The service encouraged openness and proactively developed a culture where patients, their families and staff could raise concerns without fear.

The culture within the organisation was supportive and positive. There was a genuine culture of wanting to provide the best care for patients and desire to improve services. Staff from the most senior, to the most junior posts were passionate about the service provided.

Staff felt respected, supported and valued. All staff were committed and passionate about providing high quality care to patients and their relatives. Staff felt tremendously proud to work for the service and were positive about the work they undertook. Non-clinical staff understood how their roles positively affected patient care and all staff we spoke with felt valued at every level within the service. Managers and staff told us there was a culture of collective responsibility between all staff and managers.

The culture encouraged candour, openness, and honesty. The organisation and staff were driven by the desire to learn and improve. All staff we spoke with were extremely passionate about being open and honest, so they could identify learning and improve the quality of care they gave. The relationship with leaders was open and positive and staff told us they felt supported to be honest and open about any aspect of their roles.

The service proactively sought staff feedback on the service. Staff surveys had been conducted in 2021 to elicit staff views on the service. Staff described service developments and organisational restructuring undertaken in response to the 2021 survey.

The service submitted data to demonstrate staff engagement and involvement. Alongside the clinical ideas board and development tracker operational staff attended bi-monthly clinical and audit days where direction and strategy was updated by the management team. Crew engaged in discussion around service delivery and ideas for improvements.

The service also engaged with staff in project work surrounding specific areas of individual interest. For example, updating paediatric reference cards and rearranging how the service carry paediatric airway equipment. The service enlisted interested parties in safe transfer training, development of a patient safety course with Cranfield University, digital systems upgrades and development and the Isle of Man service expansion.

Governance

Leaders operated effective governance processes, throughout the service and with partner organisations. Staff at all levels were clear about their roles and accountabilities and had regular opportunities to meet, discuss and learn from the performance of the service.

A governance structure was in place to ensure the charity was well-run, legislatively compliant and operationally effective. The board of trustees had overall legal responsibility for the charity.

The operational and clinical sub-committee managed all aspects of frontline care, reporting to the board to provide assurance on the effectiveness of the charity's clinical governance.



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Finance audit, remuneration and risk committee had delegated responsibility for overseeing all financial aspects of the charity, including audit to provide assurance that the charity remains financially viable.

The chief executive officer (CEO) was responsible for staff leadership, management and administration as well as the clinical and operational aspects of the charity.

Governance arrangements were proactively reviewed and reflected best practice. The service had a systematic approach to working with other organisations to improve patient outcomes and staff saw the opportunity and importance of working with other organisations to improve services. There were clear lines of accountability for governance from trustees, through to the executive teams, and wider staff teams.

There was an effective governance framework to support the delivery of the strategy and good quality care. There was a governance framework in place with associated meetings, staff policies, and protocols. These frameworks and procedures were well understood by staff as they were regularly reviewed as part of the daily briefings system.

There were operational governance panel meetings every month. These were attended by senior staff and provided a forum for staff to discuss the operation and performance of the service. The service was reviewed in relation to a range of performance indicators, standards, and guidelines.

The clinical standards panel (CSP) met each month to review every patient contact in an open forum. All GNAAS clinicians were encouraged to take part to further increase learning development. The panel included doctors with emergency and anaesthetic experience and paramedics. In addition, two external doctors sat on the panel. The external panellists are emergency and intensive care consultants, providing expert oversight and specialist knowledge. A forensic Home Office pathologist joined the panel meetings in the summer of 2021 providing insight into cases where patients sadly had not survived allowing an in-depth learning opportunity that was lacking previously.

The main function of the CSP was to review every case GNAAS had attended. This was undertaken as a peer review with certain types of incidents also being assessed against a set of quality performance indicators (QPI's). The panel could request additional information from crews involved (this was reviewed the following month). The panel offered advice to clinicians when needed. The panel also had responsibility for the clinical and drug standard operating procedures (SOP) to ensure they were up to date and followed best practice guidance.

The board and other levels of governance within the organisation functioned effectively and interacted with each other appropriately. We looked at meeting minutes from several different levels of meetings and saw information being disseminated along the strong lines for reporting information up and down the organisation.

Staff were clear about their roles and understood what they were accountable for. Every standard operating procedure we looked at detailed responsibilities of staff in varying roles. All staff we spoke with understood their role and could tell us what they were responsible for.

We reviewed operational quality data from July 2021 to June 2022. The data evidenced quality performance indicators for a range of standards ranging from pre hospital anaesthesia (13 cases in total with a compliance rate of 93%), suspected fracture (20 cases in total with a compliance rate of 100%), major haemorrhage (4 cases in total with a compliance rate of 100%), medical arrest (4 cases in total with a compliance rate of 100%) and low output/no output state in trauma (15 cases in total with a compliance rate of 100%). Suspected myocardial infarction and procedural sedation both achieved a compliance rate of 100%.



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There were systems in place to ensure that information identified in meetings was appropriately shared with staff and relevant actions undertaken. Designated staff were responsible for ensuring that relevant information was documented and shared between meetings with leaders, managers, and operational staff as appropriate.

Management of risk, issues, and performance

Leaders and teams used systems to manage performance effectively. They identified and escalated relevant risks and issues and identified actions to reduce their impact. They had plans to cope with unexpected events. Staff contributed to decision-making to help avoid financial pressures compromising the quality of care.

Leaders and teams used systems to comprehensively manage performance. The service used a range of key performance indicators (KPI) to measure performance and identify where improvements were required and celebrate success. We looked at records, including governance meetings, KPI reports and team meetings that showed the service monitored and pursued progress against performance.

Data was submitted by the service to evidence operational quality data for June 2022. The data showed that the service had 191 activations, including aircraft and response vehicles. Within this timeframe 110 patients had received care and treatment; 58 patients had been taken to hospital and 28 had received critical care interventions.

The service submitted data to evidence the percentage of completed additional daily duties at both bases. The service had evaluated daily duties to manage the environment as well as ensuring readiness for tasking to patient emergencies. Tasks were spread over seven days with some being required daily, weekly and some monthly. Tasks included aircraft and vehicle readiness checks, general cleaning and equipment checks etc. Checks were monitored by the head of operations at each site monthly, with a cross check bimonthly and an additional head of quality check each quarter.

Data provided (June 2022) evidenced high compliance scores of 100% for daily tasking and daily check completion at both sites.

Critical intervention data was taken from the monthly review by the CSP. Figures were taken from the number of prehospital anaesthesia, major haemorrhage, traumatic arrest, and thoracotomy cases undertaken monthly. Cases where a more robust procedure had been required including amputation at scene and cardiac pacing were also monitored.

The service had risk registers which demonstrated appropriate identification and recording of risks associated with clinical areas, corporate issues, and aircrafts. The risk register evidenced clear ownership of mitigating actions and dates that risk registers were reviewed. This was an improvement following the last inspection.

The service had a policy for the management of risk which was in date and had a review date of October 2023.

Staff told us that clinical information and patient safety alerts were received from external organisations, such as the NHS central alerting system and the Medicines and Healthcare Products Regulatory Agency (MHRA). Alerts were reviewed in order that required actions could be undertaken promptly.

The service submitted data to evidence the quality and compliance board showing ongoing items, due date and relevant department.



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Information Management

The service collected reliable data and analysed it. Staff could find the data they needed, in easily accessible formats, to understand performance, make decisions and improvements. The information systems were integrated and secure. Data or notifications were consistently submitted to external organisations as required.

The service used a holistic approach to integrate their information management processes. The service had a digital audit system that tracked all audit information which included information about cleaning schedules, incidents, safeguarding reports, and temperature logs. This system was used to monitor specific areas of risk as well as look for areas to improve the service. We found the information used to report KPI performance and delivering quality care was consistently accurate, valid, reliable, timely and relevant.

The service collected, analysed, managed, and used information well to support all its activities. An electronic system was used which was developed and built by the service. The system recorded clinical patient information providing audit, medicines management and consumables stock control. This system was now in use by multiple other air ambulances in the UK.

The software platform allowed teams to securely and easily complete pre-hospital patient care records anywhere, maximising patient safety.

All relevant information needed to deliver effective care and treatment was available in a timely way. The local NHS ambulance trust held details of patient care plans and special notes regarding patients. Crews were made aware of special notes to notify them of any advance information known about the patient and the crew could contact the emergency operations centre to retrieve detailed information. For example, if the tasking service held information regarding DNACPRs or any safeguarding children or vulnerable adult issues then this could be shared and disseminated.

The service shared all recorded information about a patient with the receiving hospital at the time of handover to ensure effective care and treatment.

The rapid response vehicles used a regularly updated mobile mapping system and there were no incidents or concerns reported relating to these. The aircraft were all equipped with navigation systems as advised and required by the Civil Aviation Authority.

The service had a dedicated Caldicott Guardian who was the named medical director for the service. A Caldicott Guardian is a senior person responsible for protecting the confidentiality of people's health and care information and making sure it is used properly. All NHS organisations and local authorities which provide social services must have a Caldicott Guardian.

Engagement

Leaders and staff actively and openly engaged with patients, staff, equality groups, the public and local organisations to plan and manage services. They collaborated with partner organisations to help improve services for patients.

The service gathered patients' views and experiences to shape and improve services. The service encouraged patients and their relatives to give feedback where possible. The service acknowledged that collecting feedback from patients was a challenge.



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The service had instigated a GNAAS nurse champion role (GNC) to encourage patients to give feedback in real time. The GNC project aimed to invite more patients to give open and honest feedback about their experience, whilst they were still in hospital (but an appropriate time in their recovery) and hence at a time which was closer to the time of their GNAAS care.

The service also encouraged and supported base visits, to enable patients and relatives to talk about their experiences and ask any questions they may have about the events or the care the provider delivered.

Patient feedback was received through the service's website and by post. We saw that complaints, compliments, and feedback forms were reviewed. The service submitted data to evidence patient feedback in June 2022. Data evidenced four base patient/relative visits had been completed. The service had received three positive patient feedback letters.

The service supported patients and relatives and had produced information sheets that provided hospital information that they could use for directions and telephone numbers.

They had produced a support document in the event of a patient death, detailing what happens when someone dies unexpectedly, emotional support with contact details for Cruse bereavement care and the Samaritans and how to register a death.

The service used a closed group patient network on Facebook, which allowed former patients to share their stories, and discuss a shared experience of care from GNAAS. This was monitored by clinical staff, enabling group members to support each other, and for signposting to professional help when required.

Learning, continuous improvement and innovation

All staff were committed to continually learning and improving services. They had a good understanding of quality improvement methods and the skills to use them. Leaders encouraged innovation and participation in research.

A collaboration between the Great North Air Ambulance Service and Gravity Industries had completed trials of futuristic technology in the hopes of reaching stranded ramblers in remote areas more quickly and easily.

The Great North Air Ambulance Service's journey toward a jet suit-enabled paramedic service started in 2020 aiming to train experienced air ambulance paramedics to use the suit to access patients in the Lake District. The training had already enabled one paramedic to complete their first free flight, safely operating the jet suit unassisted.

The main areas of focus for the jet suit paramedic was intended for on-site triage and urgent casualty Team members had innovated across the specialty of pre-hospital care by expanding the service to hot hospital retrievals (Cumbria) and prolonged transfers (Isle of Man). This had involved creating a bespoke transfer training package which included, arterial line, infusion pumps, and inotropic support. The service had also worked closely with Southampton University on data integration across the NHS.

The service had instigated a new triage category P1 (hold) for patients with a poor chance of survival or needing extensive treatment (casualties receive treatment compatible with resources). This was in addition to a P1 category categorised as victims with life-threatening injuries or illness (such as head injuries, severe burns, severe bleeding, heart-attack, breathing-impaired, internal injuries) meaning first priority for treatment and transportation.



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A P1 hold category had been trialled by the National Health Service Improvement (NHSI) as a national category. This was rolled out in the North East two years ago with a view to roll out nationally by October 2022.

The service was involved with a number of projects and future developments which included:

- **Single solution software implementation** The service had invested in a single solution compliance software system. The system was compliant with the incoming Patient Safety Incident Response Framework and could provide a single system solution for incident management, risk, board assurance, compliance checks and project management. The software provided real time CAS/MHRA alerting and National Institute for Health and Care Excellence (NICE) updates, along with Care Quality Commission key lines of enquiry (KLOE) framework and updates.
- **Review of medicines** (what, where and how the service carry and store drugs)
- **Missed cases review process**
- **Clinical Fellow programme development (PHEM)**
- **Doctor recruitment and training programme**
- **Patient safety and investigation course** The service was currently developing a patient safety and investigation course with Cranfield University which will be aligned with the incoming Patient Safety Incident Response Framework (PSIRF) principles.
- **Ventilator analysis** The service had developed a software system to extract real time data from both ventilator and patient monitors. Historically prehospital ventilation was only reported on in the patient record. This capability was through a Bluetooth connection between the service ventilator and patient monitor. The ventilator could export data to the monitor and the software platform then extract both datasets from the monitor. This technology could provide a completely new platform for pre hospital ventilation strategy research and best practice guidance.

GNAAS were active in research and had published a number of novel studies.