

Essex & Herts Air Ambulance Trust

Essex and Herts Air Ambulance Trust

Quality Report

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

Summary of findings

Letter from the Chief Inspector of Hospitals

The Essex and Herts Air Ambulance Trust is operated by Essex and Herts Air Ambulance Trust, and is a charity providing a free life-saving Helicopter Emergency Medical Service (HEMS) for the critically ill and injured of Essex, Hertfordshire and surrounding areas. Each HEMS Team consists of a pilot and co-pilot, a pre-hospital care doctor and a critical care paramedic. Pre-hospital emergency medicine focuses on caring for seriously ill or injured patients in urban, rural, or remote settings before they reach hospital, and during emergency transfer to hospital or between hospitals. The HEMS teams use helicopters, during daylight hours and rapid response vehicles (RRVs) during times of diminished natural light, to reach the scene of an incident with life-saving support equipment to deliver advanced clinical care.

We inspected this service using our comprehensive inspection methodology. We carried out the announced part of the inspection on 30 January 2018.

To get to the heart of patients' experiences of care and treatment, we ask the same five questions of all services: are they safe, effective, caring, responsive to people's needs, and well-led?

Throughout the inspection, we took account of what people told us and how the provider understood and complied with the Mental Capacity Act 2005.

The main service provided by this service was urgent and emergency care.

Services we do not rate

We regulate independent ambulance services but we do not currently have a legal duty to rate them. We highlight good practice and issues that service providers need to improve and take regulatory action as necessary.

We found the following areas of good practice:

- The service had effective processes in place to report, investigate incidents, and share learning.
- There were robust processes to ensure staff assessed risks to themselves and others for safe care and treatment at all times.
- The service ensured all equipment and consumable items including medicines were safely monitored, stored and administered.
- The service ensured that staff received the appropriate training and that the right skill mix was available for shifts.
- The service had major incident and business continuity plans in place and undertook scenario based training for major incidents to ensure staff understood their roles.
- Highly qualified staff delivered treatment based on nationally recognised guidance and best practice and were encouraged to undertake research and share learning.
- The service performed well against compliance of its own key performance indicators (KPIs) and actively sought ways to record outcomes.
- Staff co-ordinated well with all other services involved and displayed effective multi-disciplinary working.
- Staff treated patients with kindness, dignity, and respect and feedback comments were very positive. Patients and relatives were particularly appreciative of the patient liaison manager support.
- Services were organised and planned so that they met the needs of the local population to ensure that patients had timely access to urgent and critical care treatment.

Summary of findings

- The service had effective leaders in place who had the skills, knowledge, experience, and integrity they needed to ensure the service met patient needs.
- Staff knew the service vision and strategy and displayed the values of the service.
- There were established processes in place to ensure effective governance and monitor the quality of service to identify areas of improvement.
- There was a corporate risk register in place and the service had identified the need to monitor and review risks at a local level and was taking steps to address this.
- The culture within the organisation was extremely supportive and positive with staff describing it as being 'part of a family'.
- The service was committed to continuously improve and developed a number of sustainable innovations and improvements to the service.

Heidi Smoult

Deputy Chief Inspector of Hospitals, on behalf of the Chief Inspector of Hospitals

Summary of findings

Our judgements about each of the main services

Service

Emergency and urgent care services

Rating Why have we given this rating?

The main service provided was the provision of urgent and emergency care to critically unwell or injured patients.

The service had robust, committed leadership in place with a very positive learning culture. There were effective processes to identify, and learn from incidents and share best practice. Safety was paramount with systems in place to ensure patients received safe, high quality care and treatment at all times.



Essex and Herts Air Ambulance Trust

Detailed findings

Services we looked at

Emergency and urgent care

Detailed findings

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Background to Essex and Herts Air Ambulance Trust

Essex and Herts Air Ambulance Trust is operated by Essex and Herts Air Ambulance Trust, a registered charity. The charity was established and started operating as the Essex Air Ambulance in 1998. In April 2007, the charity commenced operation of another air ambulance in Hertfordshire and became the Essex and Herts Air Ambulance Trust (EHAAT). It is now an independent air ambulance service with two airbases, one in Earls Colne, Essex and the other in North Weald, Hertfordshire. The service primarily serves the communities of Essex and Hertfordshire. On this inspection, we only inspected the Earls Colne site.

The Earls Colne site is the charity and operations headquarters as well as the air base for the Helicopter Emergency Medical Service (HEMS) team who operate one air ambulance helicopter or one of two rapid response vehicles (RRVs).

The service has had a registered manager in post since July 2011.

The announced inspection took place on 30 January 2018.

Our inspection team

The team that inspected the service comprised a CQC lead inspector, two other CQC inspectors, and an assistant CQC inspector. The inspection team was overseen by Fiona Allinson, Head of Hospital Inspections.

Facts and data about Essex and Herts Air Ambulance Trust

The main service is the provision of urgent and emergency treatment for the critically ill and injured of Essex, Hertfordshire and surrounding areas.

The service directly employs critical care paramedics (CCPs) as well as a cohort of seconded CCPs from the local ambulance service. The pre-hospital emergency care doctors are seconded as part of the work plan they agree with the hospital where they are based. Clinical staff worked across both airbases.

The service does not require an accountable officer for controlled drugs (CDs) but the registered manager is the medicines lead.

The service is registered to provide the following regulated activities:

- Diagnostic and screening procedures
- Surgical procedures
- Transport services, triage and medical advice provided remotely,

Detailed findings

• Treatment of disease, disorder or injury

During the inspection, we visited the Earls Colne headquarters and airbase. We spoke with 13 staff including; executive and management staff, trustees, critical care paramedics, doctors, and a clergyman. We were unable to speak directly to patients and relatives during our inspection due to the urgent treatment nature of the service. We did speak with two patients and one relative by telephone following the inspection and we reviewed feedback information from patients and relatives following episodes of care. During our inspection, we reviewed 10 sets of patient records.

There were no special reviews or investigations of the service ongoing by the CQC at any time during the 12 months before this inspection. The service was previously inspected in January 2014, which found that the service was meeting all standards of quality and safety it was inspected against.

Activity (1 January 2017 to 10 January 2018)

In the reporting period 1 January 2017 to 10 January 2018, the Earls Colne airbase mobilised 749 missions by air and 186 missions by use of rapid response vehicle. The most common type of call was medical illness followed by road traffic collisions.

There were 14 registered critical paramedics, and five emergency doctors working at the service, which also had a bank of temporary emeritus staff that it used.

Track record on safety for the period 1 January 2017- 10 January 2018.

- No Never events
- 84 Clinical and operational incidents, all classified as no harm.
- No serious incidents
- No complaints

Safe	
Effective	
Caring	
Responsive	
Well-led	
Overall	

Information about the service

The main service provided by this ambulance service was emergency and urgent care.

Summary of findings

We found the following areas of good practice:

- There were effective processes in place to report and investigate incidents and share learning.
- The service ensured that staff received the appropriate training and that the right skill mix was available for shifts.
- There were effective systems and processes in place to safeguard vulnerable adults and children from abuse.
- The service used robust processes to protect people from the spread of infection and ensured equipment was suitably maintained for purpose.
- The service had good oversight to ensure safe storage and administration of medicines.
- Staff ensured patient information was recorded and managed to protect patient confidentiality
- The service ensured appropriate protocols were in place to assess and respond to patient risk.
- The service had major incident and business continuity plans in place and practised major incidents to ensure staff understood their roles.
- Staff were encouraged to undertake research and share learning. They delivered patient care and treatment based on nationally recognised guidance and best practice.
- Staff continually assessed and re-evaluated care to ensure provision of the most appropriate evidence based treatment.

- The service monitored compliance against its own key performance indicators (KPIs) and looked for ways to record outcomes.
- Staff received induction and appraisals and had the skills, knowledge, and experience to deliver effective care and treatment.
- Staff co-ordinated well with all other services involved and displayed effective multi-disciplinary working.
- Staff treated patients with kindness, dignity, and respect. Feedback comments were 100% positive.
 Patients and families were very appreciative of the patient liaison manager support for those with unanswered questions after treatment.
- Staff were sensitive to the impact that care and treatment had on patients and those close to them, both physically and emotionally.
- The service actively supported staff through regular welfare checking and providing an open and supportive environment.
- Services were organised so that they met the needs
 of the local population and patients had timely
 access to urgent and critical care treatment. The
 service ensured that there were effective procedures
 in place to respond and learn from complaints.
- The service had committed experienced leaders in place who had the skills, knowledge, experience, and integrity they needed to ensure the service met patient needs.
- The service had an established vision and strategy known by staff who displayed the values of the service.
- The governance processes were effective and the service was proactive in sharing learning from governance and death and disability meetings.
- The risk register was mainly corporate and did not always contain inception dates and updates, but the service had identified this and was in the process of moving to a more responsive effective model.

- The culture within the organisation was extremely supportive and positive with staff describing it as being 'part of a family'.
- The service encouraged engagement of staff, medical professionals, and the public and provided information in several formats for ease of access.
- The service developed a number of sustainable innovations and improvements to the service.

Are emergency and urgent care services safe?

Incidents

- Essex and Herts Air Ambulance Trust (EHAAT) reported no serious incidents, or never events from January 2017 to January 2018. Never events are serious incidents that are entirely preventable as guidance, or safety recommendations providing strong systemic protective barriers, are available at a national level, and should have been implemented by all healthcare providers
- Staff were aware of the process for reporting incidents and accidents. They told us that there was a full debrief for the staff involved in an incident and that they received feedback both via e-mail and face to face. They said that the senior management team and staff were open and transparent in the reporting and investigation of incidents.
- Incident reporting was included in mandatory training for all staff. Information provided by the service showed, 100% of staff had received this training. Four of the clinical staff we spoke with described the current incident reporting system in use and how it had changed recently.
- The service used an electronic reporting system to report incidents and had recently (November 2017) changed to a newer internet based safety management system that allowed faster processing and quicker feedback to all levels of the clinical operation. Staff had password-protected access, remotely from any device.
- For the period January 2017 to November 2017, 57
 incidents (both clinical and operational) were reported
 on their previous electronic recording system. These
 included incidents from both airbase locations as the
 data provided did not identify which location. There
 were no specific themes identified and no patient harms
 recorded.
- For the period 26 November 2017 to 29 January, the service reported 28 incidents on the new internet based system. The new system did not differentiate between clinical and operational incidents and the service was investigating how this could be introduced. Eight of the 28 incidents recorded related to the Earls Colne base. We reviewed two of the new incident reports and saw

- that they had been appropriately investigated in a timely manner with key findings and learning identified and action plans in place to mitigate future risks. Action plans demonstrated clear ownership and completion dates.
- Staff reported changes to practice, which had occurred as a result of the incident reporting process. For example, they had changed to pre-filled syringes supplied from a local hospital following drug related incidents and changed the suppliers of a piece of equipment used during the process of intubation as crew members reported difficulty using due to it being stored in a curved position in the packs.
- EHAAT liaised with the local NHS ambulance service to investigate and learn from incidents. The service investigated any incident that involved both services and then the two organisations liaised to share reports and learning. We saw evidence of shared learning from an incident where a piece of equipment had failed at a scene and how this had been managed.
- Incidents were reviewed by the recently (December 2017) formed safety committee, with staff allocation of actions as a result of the meeting.
- Incidents formed part of regular discussion at executive monthly meetings and clinical governance meetings as well as a newly formed safety committee. We reviewed a sample of meeting minutes, which demonstrated a broad range of attendance from clinical staff to senior managers within the service.
- The service had a robust duty of candour policy that all staff had access to, and although they did not provide formal duty of candour training, there was a mandatory training module titled 'Being open'. All of the clinical staff we spoke with had a good understanding and duty of candour training was provided by NHS partner organisations.
- 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 reasonable support to that person. This regulation requires staff to be open, transparent, and candid with patients and relatives when things go wrong.

- Duty of candour was a key performance indicator (KPI) which the board of trustees monitored and was reported at each board meeting, executive level meeting and at the monthly pre-clinical governance day team meeting. Any incident that was likely to trigger duty of candour was discussed at senior clinical level.
- At the time of our inspection, the service reported that there had been no requirement for the application of the duty of candour and we saw that this was considered when missions were discussed at monthly governance days and death and disability meetings and recorded on their electronic incident reporting system.

Mandatory training

- The human resources department had oversight of mandatory training. Information provided by the service showed that the mandatory training target was 100% and compliance was 100%. This was for all clinical staff and included those seconded by other organisations.
- Mandatory training was delivered mainly by e-learning and was comprehensive covering a wide range of subjects including but not limited to; accident and incident reporting, fire safety, conflict resolution, medicines management, information governance, learning disabilities awareness, risk management and records management.
- All critical care paramedic (CCP) staff received blue light driver training from their parent organisation and the HR department held records of training.
- All CCPs had received advanced training in critical care and held recognised qualifications.

Safeguarding

- Safeguarding was one of the mandatory training requirements and all clinical staff received adult safeguarding training and were trained to level three safeguarding for children. This complied with the Safeguarding children and young people: roles and competencies for health care staff intercollegiate document 2014. At the time of our inspection, compliance with training was 100%.
- The service's dedicated safeguarding lead was the registered manager and they provided advice in the

- event of a staff raising a safeguarding concern. The clinical manager of the airbase was also available for advice on any safeguarding issues as was the new patient liaison manager.
- Clinical staff we spoke with were knowledgeable about safeguarding concerns, how to recognise and report them.
- Pilots were subcontracted from an external specialist aviation company and were not required to receive any formal safeguarding training. They had all read the policy and knew the process for recognising and referring concerns.
- There were safeguarding policy and procedure documents that referenced recent legislation. The policy and procedure documentation outlined what safeguarding was, and provided definitions of the different types of abuse. The policy also covered staff responsibilities with regards to raising safeguarding concerns and the procedure by which to report these. All staff had remote access to policy documentation.
- Staff discussed safeguarding in clinical governance and executive team meetings where appropriate.
- Staff confirmed that if there was knowledge of a safeguarding concern prior to attending a scene they were informed at the time of dispatch but often information was not available due to the emergency nature of their missions. Staff shared safeguarding concerns that were apparent on scene with the local NHS ambulance service and made referrals to the local authority through the local single point of contact.

Cleanliness, infection control, and hygiene

- The aircraft, rapid response vehicle (RRV), and base location appeared visibly clean and tidy.
- The service had an infection, prevention, and control (IPC) policy that was within review date. The policy cross referenced other associated policies such as the uniform policy and the haemorrhagic fever standard operating procedure and included advice and guidance for staff to follow including, hand hygiene, the use of person protective equipment (PPE), vehicle and aircraft cleaning, sharps injuries and managing patients with specific infections.

- The service performed IPC observational checks on a daily basis to ensure aircraft and vehicle readiness. The crewmembers performed weekly aircraft and vehicle cleaning, followed by an IPC audit with regular monthly quality assurance checks by clinical and operational managers. Information supplied by the service showed that average compliance of vehicle checks was 100% during the period 1 January 2017 to 8 January 2018 with vehicle cleanliness being 98.7%. There were mitigating factors of adverse weather for the non-compliant recordings.
- The aircraft cleanliness checks were 99.7% for the same period with mitigation again shown for occasions when aircraft was not 100% clean. An external aircraft cleaning contractor was employed to provide monthly external cleaning and a quarterly deep clean using appropriate aircraft cleaning and antimicrobial/bacterial solutions. The service had considered more frequent cleaning but as they did not often convey patients, this was deemed satisfactory. The crews could request a deep clean between the regular visits if they felt it was appropriate.
- The service monitored their performance on IPC audit by airbase, RRV, and aircraft, and reported this to the senior management team and the board of trustees.
- The airbase and HQ building was cleaned by an external company and monthly cleaning audits were reported by EHAAT staff. Information supplied by the service for the period 1 January 2017 to 20 December 2017 showed that in 18 out of 27 audits, issues were identified and reported back to the cleaning company. However, the nature of the concerns was not specified on the report supplied and there was no evidence of further action taken despite the high numbers of dissatisfaction in cleaning standards. This was discussed with the senior leadership team who were monitoring this closely, and looking at alternative services should this not improve.
- There was an IPC named lead and the airbase had a specific IPC information board with recommended actions and advice.
- Staff had access to changing rooms with shower facilities at the service's airbase location. Uniforms were washed on site and dried in specialised drying cabinets to ensure decontamination of any heavily soiled uniform, in line with the service's IPC policy. All linen used on stretchers was disposable.

- The aircraft and RRV contained PPE to protect staff, and prevent and control the spread of infection. Staff carried gloves, aprons, facemasks, and cleansing wipes and we observed staff using these when providing clinical care. The CCPs and doctors also carried personal hand gel to ensure hand cleanliness.
- Staff disposed of clinical waste in colour-coded bags. The clinical waste bin at the airbase was securely locked. Sharps (needles) were safely disposed of in locked, dated, and signed sharps bins. There was sharps management information on display for staff guidance.

Environment and equipment

- EHAAT kept a fleet of one (leased) air ambulance helicopter and two rapid response vehicles (RRVs), at the Earls Colne airfield base. One RRV was used at a time with the other as a spare to ensure availability. The RRV was used when the air ambulance was unavailable, usually due to weather or daylight restrictions. Only one of the RRVs was seen during the inspection as the other was being serviced at the time.
- The aircraft and RRVs were not locked but were kept in a locked hanger overnight. The keys were stored in a locked cupboard. Access to the site was via an identification 'swipe card' and key coded locks. Staff escorted all visitors onto and off the site.
- The operational director had overall responsibility for the fleet with the servicing and MOT managed by the clinical operations manager. There were service level agreements (SLAs) for each vehicle type with designated maintenance schedules. The vehicle leasing dealerships also sent reminders as a back-up for maintenance. We reviewed the maintenance, MOT, and insurance documentation and found all to be in order.
- There was a contract with a 24 hour emergency services specialist firm who provided all wheel changes, puncture repairs, and small maintenance as required for the RRV.
- The airbase had suitable facilities, which included but was not limited to: the aircraft hangar, a training room and separate training area for practical sessions, a briefing room, clinical storage rooms, and changing

rooms. There was also a visitor centre with interactive activities for visitors. The service clearly delineated the separate training and equipment area so as not to be confused with in use equipment.

- The service kept the aircraft hangar where the helicopter and RRVs were parked free from clutter and floor markings were clearly depicted a designated path to ensure safety in areas of vehicular movement.
- The service had a system for replenishing consumable supplies carried in the pre-assembled kits. If they returned to base, the crew replaced medical supplies they had used or replaced the pre-assembled kit. The kits were stored on shelves next to the clinical room and numbered and safety tagged and used in rotation. There was a whiteboard in the storage area with the date and initials of the person who had replenished and checked the kit. The kits contained the appropriate range of clearly marked and separated paediatric and adult equipment, in various sizes.
- We checked one of the pre-assembled kits and found one piece of equipment out of more than 30 items (an airway), that was four weeks out of date. We informed the clinical manager who immediately removed the item and organised checking for all pre-assembled kits. This was reported on their electronic incident reporting system and within two hours had been disseminated to the clinical teams for vigilance.
- Clinical stores were supplied either by the local NHS ambulance service or sourced by EHAAT. The clinical storage area was well organised with all items in clear boxes labelled with colour codes to denote ordering method, the type of item and the nearest expiry date. Volunteers and the caretaker replenished the stock and an independent auditor did a full stock check every six months.
- The 12 pieces of consumable medical supplies in the storage room we checked were all within expiry date with packaging still intact.
- We checked seven pieces of clinical electrical equipment including suction units, observation monitors and resuscitation equipment and found all to be within electrical testing date.

- The service kept a spreadsheet of equipment maintenance/calibration dates and these were all within date.
- Staff reported faulty equipment via the service's internal electronic incident reporting system. We saw evidence that equipment faults were reported and acted upon in a timely manner.
- The pilot and co-pilot performed all required aircraft safety checks prior to the commencement of shift in a protected allocated time period.
- Clinical staff performed daily vehicle and equipment inspections on the RRV prior to commencing their air ambulance checks. This ensured that the vehicle was ready for use when the helicopter was no longer available. Staff recorded the vehicle inspections on electronic check sheets and submitted to show compliance. We reviewed records that demonstrated vehicle checks had taken place on all days prior to our inspection for the previous three months.
- All equipment within the RRV and helicopter aircraft was stored safely. During flight, equipment bags were secured with straps to prevent movement and possible injury to patient or crew.
- The service introduced additional measures to ensure delivery of patient care was not affected by any delay in land ambulance response. Ventilators, specialist carry sheets and patient scoop stretchers were stowed on the helicopter for the co-pilot to deliver on scene and enable patients to be safely carried directly from scene to aircraft should it be required.

Medicines

- Medicines were securely stored in the locked clinical room in locked cupboards and a locked medication fridge. Staff checked the fridge temperature and high/ low ranges daily and recorded electronically. The clinical manager audited these and where there were anomalies we saw the appropriate action was taken such as contacting the local NHS medicine supplier for advice.
- A local NHS hospital service supplied the medicines under a service level agreement (SLA) and the service shared any medicines related incident with them.

- Staff checked all controlled drugs (CDs) daily at the start
 of every shift to ensure that CD pouches contents
 matched the content list and that CDs in the storage
 cabinet were reconciled with the controlled drug
 registers. CDs are medicines that require extra checks
 and special storage arrangements because of their
 potential for misuse.
- CD pouches were tagged to ensure that tampering was identified immediately.
- The clinical crew kept the CD pouch with them at all times and stored it securely within the aircraft and rapid response vehicle when in transit.
- We reviewed the CD registers and saw that two staff members had signed to confirm all CD's had been checked consistently on a daily basis.
- We checked five CDs against the register and all were recorded and stored appropriately. We checked five fridge items, nine other drugs, and all items were in date.
- Medicines taken on missions were standardised and stored in specific bags. Two members of clinical staff checked out the medicines at the start of a shift and checked back in at shift end.
- The service had recently moved to a prefilled syringe system of administration for some drugs supplied by the local hospital as this reduced the time to administration on scene and ensured dosage accuracy. Medicine administration was documented in the patient's record.
- EHAAT had a medicines policy in place, which reflected current practices in medicine, such as, ordering, storage, and disposal. It referenced up to date information from the most recent legislation and guidance.
- There was a system in place to action medicine safety alerts and recalls.
- Medical gases were securely stored in a locked cage in the aircraft hangar, with separate labelled shelves for empty and full cylinders. There was appropriate signage to warn staff of combustible gases in place. All medical gases were in date. Medical gases were secured appropriately for transport in both the helicopter and RRV.

- Staff input patient records on specially designed electronic patient report forms (PRFs). A helicopter emergency medicine service (HEMS) doctor following their secondment to the service designed the internet based PRF system. The system had been shared and adopted by other air ambulance providers due to its versatility and efficacy and was password protected and accessible by tablet or computer.
- The clinical director reviewed all PRFs weekly to ensure consistency and accuracy of data recorded.
- We reviewed 10 paper copies of recent PRFs and saw that staff completed them appropriately with allergies and medical history recorded and that they contained information pertinent to the episode of patient care.
- EHAAT stored previously used paper PRFs securely in a locked room at the service headquarters.
- Staff reported that they did not routinely have access to advanced notification of do not attempt cardio pulmonary 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, but the dispatcher provided any information available.
- Staff completed the PFR and provided a printed copy along with the clinical observations and cardiac readings, if appropriate, to receiving hospitals at the time of admission.

Assessing and responding to patient risk

- Clinical staff assessed risks at scenes when attending patients. These included risks to the patients and staff such as environmental as well as clinical risks.
- Staff had access to a standard operating procedure (SOP) to treat potential sepsis and open fractures. Staff had access to antibiotics if clinically indicated.
- Staff assessed whether patients triggered the locally developed trauma triage tool (TTT), which determined where a patient requiring further treatment was taken. TTT positive patients were usually conveyed to a major trauma centre and if TTT negative, to a trauma unit based in a local hospital.

Records

- Patient clinical observations such as blood pressure, pulse rate, and respiratory rate were recorded on the electronic monitors used at scene to allow for early detection of deterioration in a patient's condition.
- Staff used the Glasgow Coma Scale to assess impairment in consciousness levels and a variety of clinical protocols for specific conditions to ensure all clinical risks were considered.
- 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.
- There was an SOP with recommended actions to use light sedation to restrain disturbed or violent patients who may be at risk of causing harm to themselves or others.
- Clinical staff performed a verbal risk analysis before leaving a scene to ensure that any risks to a patient were considered for their on-going transport.
- Staff had access to an external clinical expert advice service at all times via the telephone and the advisors were also involved in the death and disability meetings to retrospectively review missions and how they may have been done differently.

Staffing

- The clinical and non-clinical staff were employed to work across both bases operated by the service.
- The service employed five whole time equivalent (WTE) critical care paramedics (CCPs) who undertook dual roles as clinical managers, patient liaison managers and operational manager. There were also nine WTE CCPs seconded for a period of three years duration from the local NHS ambulance service making a total of 14 CCPs on the rota, which covered both airbases.
- The service aimed to have six WTE pre-hospital care doctors seconded to the service from a teaching hospital for a period of nine months on a rotation basis. At the time of inspection there were five doctors seconded with shifts covered by the emeritus doctors. Five highly qualified medical consultants also undertook regular shifts and provided mentoring, training and governance.

- The service did not use agency staff but did have a bank of committed emeritus staff (doctors and CCPs that had completed their fixed term secondment, but maintained their competencies by undertaking regular shifts and attending clinical governance events) who filled vacant shifts when necessary.
- Staffing rotas provided by the service showed there was always one doctor and one CCP on each shift. This meant that all missions were covered with the appropriate staff.
- The seconded CCPs also covered critical care desk (CCD) shifts at the local NHS ambulance service where the service's vehicles including the helicopters were dispatched from.
- A team of eight pilots and co-pilots employed by an external aviation company operated the helicopters. A pilot and co-pilot crewed each flight, which ensured that the clinical staff were able to concentrate on clinical concerns rather than having to act as 'look out' or perform navigational roles on the aircraft.
- The service reported 'available shifts covered (both aircraft)' in their regular monthly key performance indicators (KPIs) with a target of 100% and a 'sensible expectation of 95%'. At the time of inspection the 'year to date' figure was 98.7% with the KPI data from the months of September and October 2017 showing 100%.
- The service placed emphasis on ensuring staff were competent at carrying out dual roles. Therefore, in the event of staff being required, they were able to call on the clinical, operational, and patient liaison managers for clinical work.
- The service recognised doctor recruitment as a key challenge and recruited up to 18 months ahead of posting required in order to secure staff with appropriate skills. They were proactive in looking at access arrangements for doctors and had recently (December 2017) signed a contract with a local NHS organisation to provide another recruitment pathway.
- The service was working towards accreditation for Pre-Hospital Emergency Medicine (PHEM) Doctor training status, which will allow another route for doctor recruitment.
- The service sickness rate was very low with EHAAT employed clinicians (clinical managers, patient liaison

managers, and clinical operations manager) losing two days to sickness in the period January to December 2017. For the same period, there were two days lost by doctors and five days by the other CCPs. The existing staff covered all shifts.

Anticipated resource and capacity risks

- The service planned ahead for any resource or capacity risks, and these were outlined in the business continuity policy.
- The service accessed a live regular weather forecast and the pilots checked this prior to each mission to ensure it was safe to fly. The pilot always made the final decision on flying safety and this was covered extensively in the daily briefing. In the event that the aircraft could not be flown, the clinical team would utilise the rapid response vehicle (RRV). The pilots told us it was rare for weather to disrupt flights.
- The staff were knowledgeable about local hospital speciality services such as cardiac and neurological centres. This meant they were able to anticipate the receiving hospitals, alert them to an incoming patient once the crew had stabilised them, and ensure capacity.

Response to major incidents

- The service worked in partnership with the local NHS ambulance service and this included organising major incident exercises. The last of these was in 2015 and a further major exercise is planned for 2019.
- The service had an in date business continuity plan in place. We reviewed this document, which demonstrated there were clear lines of responsibility and guidance in the occurrence of events that may stop or interrupt normal business.

Are emergency and urgent care services effective?

Evidence-based care and treatment

• The service had a broad range of standard operating procedures 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 on line from mobile devices.

- · We reviewed a selection of policies and standard operating procedures and saw that they were version controlled, were within review date and contained up to date referencing.
- Staff were required to acknowledge that they had read recent policy changes via an electronic signature. The read receipt was required within seven days and staff received an automated reminder if policies had not been read. Staff confirmed this process took place and was effective in ensuring staff kept up to date with policy changes.
- Staff performed daily reviews of SOPs or policies selected at random during the daily brief, prior to mobilisation.
- Care was planned in line with best practice developed pathways.
- The service encouraged staff who joined the service to develop a research project as part of their work plan and contribute to journals and conferences. Research was presented to the clinical teams and shared in the wider forum at medical conferences.
- We saw recent research posters including one on hypotension post-rapid sequence induction (RSI). RSI is a form of airway management to induce anaesthesia. The research posters reflected current interests for the clinical teams and referenced recent national guidance.
- The doctors and critical care paramedics (CCPs) showed a drive to ensure the care they provided was leading the way in pre hospital emergency treatment.
- EHAAT were part of the Association of Air Ambulances and worked closely with neighbouring air ambulances to share best practice and this has resulted in some of them migrating to the same electronic database. This common database allowed audit and longer, in-depth research. The service had also invested into the database for the critical care desk (CCD) and was working towards joint research.
- The service belonged to an organisation called SERP (Safer Essex Road Partnership) where they were working as a team with other organisations to bring down road deaths and injuries and sharing data to the wider community. They recently published a joint research paper "RESCUER" looking at a collaborative assessment of pre-hospital fluid in trauma patients.

Assessment and planning of care

- The clinical and pilot staff planned possible destinations on route, with the use of information technology mapping systems, which calculated journey times by either land or air ambulance. Destination depended on the clinical condition of each patient, with conveyance to the most appropriate facility risk assessed with regard to time and patient need.
- There was continual communication between clinical staff and the pilots both in transit and whilst on scene. Pilots were updated as to which receiving hospital the patient was being transferred to and by what method, as it was often quicker to transport a patient to a local hospital by land ambulance than by air.
- Staff continually assessed and planned patients care to make sure that they received the correct interventions to maintain their safety and wellbeing. This included patients with mental health conditions to ensure safety for both staff and patient.
- The clinical team assessed and triaged patients at the scene and depending on the triage outcome, conveyed patients to the nearest or most appropriate hospital.
- Pilots regularly updated clinical staff on the access and egress to ensure transportation from scene took place in a timely and effective way.
- Staff on missions had access to enhanced clinical advice and support. There was a clear timetable of senior clinicians to contact via text or telephone calls throughout their shifts.
- Clinical protocols were in place for the management of specific conditions, such as, strokes and heart attacks.
 The protocols clearly identified the treatment pathways for children and adults.
- The service had a range of version controlled and dated standard operating procedures (SOPs) which gave guidance on very specific injuries or situations which enabled staff to plan the most appropriate care.

Response times and patient outcomes

 There were no nationally specified key performance indicators for this type of service although the service did monitor a number of clinical death and disability 'flags' such as; helicopter launch time less than five

- minutes, and transfer time of less than 15 minutes, among others. Information supplied by the service for the period 1 January 2017 to 10 January 2018 showed that these targets had been met in all cases.
- The service also monitored a series of internal outcomes such as surgical procedures, the number of rapid sequence intubations (RSIs) it performed as well as missions by type, call sign, time of day and crewmember. This enabled them to tailor their service to the times most required and the equipment needed.
- The service reported difficulty in reporting patient outcomes once patients had been received at a hospital, as they often were unable to access on going patient data from receiving hospitals. The patient liaison managers (PLMs) have provided some qualitative feedback and acted as a conduit to patients to allow more formal feedback and research in the future. The service have also recruited to a research post in conjunction with a local university with a plan to commence research into all aspects of care to ensure they provide a holistic experience for patients.
- The service were in the process of developing a number of specific clinical pathways for major haemorrhage, cardiac and neurological injuries among others. There were plans to implement performance monitoring of these in the future.

Competent staff

- Staff had the appropriate skills, knowledge, and experience to deliver effective care and treatment.
 There was a recruitment and selection process for new staff in line with the recruitment policy. The human resources (HR) department recorded evidence of staff's employment contracts, DBS checks, references, and work histories.
- Yearly appraisal rates for the CCPs and staff directly employed by EHAAT was 100% with seconded staff appraised by their own organisation and managed by senior CCPs.
- The service had oversight of seconded doctor's appraisals with information sent from the parent organisation. At the time of inspection, the five doctors seconded to EHAAT had all received appraisals within the previous 12 months.

- We reviewed four CCP appraisal records and found them to be comprehensive including reflection and identification of learning needs. Staff we spoke with said that appraisals were meaningful and that they found them useful as 'career pointers'. They also reported that the service was supportive of accessing courses and training needs identified.
- At the time of inspection, the service was supporting two CCPs on Master's Degree courses.
- All new employees and crew received a service induction. This was normally carried out on day one, or at least within a month of them starting. We reviewed the induction procedure and saw that it included introduction and briefing with the relevant teams within EHAAT, communication, operations, clinical, IT systems, health, and safety.
- Induction is the process by which employees and crew were integrated into the organisation. It ensured they obtained a good understanding of how the organisation works, including the values and objectives. It also ensured that all employees and crew had the knowledge and resources to perform their role in a safe environment.
- Experienced critical care paramedics supervised all new members of staff and pre-hospital emergency medicine trained doctors and were supernumerary during their induction period. Then they were supervised to complete their clinical competencies. The induction process was robust and took around three months, induction was extended if needed to enable the staff to develop the appropriate skills.
- Staff we spoke with confirmed they had received induction and that the service supported them to remain supernumerary until they felt confident to proceed independently.
- All clinical staff undertook a one-week course in advanced pre-hospital helicopter emergency medicine and a one day course in advanced surgical training. At the time of inspection the compliance rate was 94% with three new staff booked to attend in March 2018.
- The HR department checked all driving licenses on induction and yearly thereafter. As well as the NHS blue light training which they received prior to commencing with the service the CCPs and clinical managers all

- undertook a two hour driving assessment on joining the service and were placed on a one day advanced car handling course. At the time of the inspection, two new members of staff were awaiting training dates.
- The service was planning to reintroduce the Royal Society for the Prevention of Accidents (RoSPA) Gold driver training course during 2018. Although this was not a requirement, it was considered the gold standard for emergency driving skills.
- The clinical teams maintained and improved their skills outside of missions via a range of practical scenario sessions, which they rehearsed between missions.
- The service held 'death and disability' (D and D) meetings three times per month. These brought staff together to reflect on previous episodes of care and suggest future changes to practice, if required. Staff reported that they were supported by senior clinicians to speak openly about changes to improve practice.
- The service planned and delivered monthly clinical governance days. These were open to non EHAAT staff and advertised on social media. All staff who attended could download an electronic bar code to their personal device. They then scanned the code to confirm attendance, which enabled attendees to print a certificate for their continuing professional development record.
- The clinical governance days enabled the sharing of best practice in line with national guidance on a range of illnesses and injuries. We saw complimentary comments from medical professionals who had attended the days. EHAAT funded staff to attend one governance or death and disability day per month if it fell on a day off.

Coordination with other providers

- Care was delivered in a coordinated way with the other services involved. We observed this during a mission where the air ambulance crew was effective in collaboration with the local NHS ambulance service and other emergency services on scene.
- There were clear lines of responsibility and accountability for the service.
- The service had contracts in place with their tasking NHS ambulance service. They also had coordination

arrangements with the local NHS hospitals, fire and rescue and police services. One of the senior team attended 'Air Ops' meetings, with the local NHS ambulance senior staff on a bi monthly basis. Topics discussed were, operations, dispatch, training and staffing.

Multi-disciplinary working

- All clinical staff were involved in assessing, planning, and delivering people's care and treatment and the doctors and CCPs worked well together to anticipate the needs of the patients.
- We observed effective communication between the clinical crew and the aircraft team with both checking that the others had all the information they needed.
- The teams liaised well with other services and teams of individuals they worked with such as the local NHS ambulance service, police and fire services at scenes.
 Staff felt it was very important for them to work as a team with their colleagues both clinical and aircraft as well as with the road ambulance crews and other emergency services as this facilitated good communication to overcome challenges at the scene and during transfers.
- We observed the handover between the air ambulance staff and the hospital staff during our inspection. The air ambulance staff delivered the handover in a professionally recognised clinical format for patients with traumatic injuries or medical emergencies. All information was provided in a concise and efficient manner to enable the hospital team to progress with the patient's care.
- EHAAT staff contributed to regular trauma network meetings, which covered a range of subjects including case studies and audits. Meetings were well attended with a broad range of representation from various receiving hospitals and other emergency care providers.

Access to information

 Staff did not always have access to 'do not attempt cardio pulmonary resuscitation' (DNACPR) or special notes. They reported that this was rarely an issue as they would not normally be deployed to an address where there was a known concern and if attending away from a patients home that information would not be available to anyone.

- If the tasking service held information regarding DNACPRs or any safeguarding children or vulnerable adult issues, they informed the service providing there was a note on the address.
- 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 the appropriate navigation systems as advised by the Civil Aviation Authority.
- The service shared all recorded information about a patient with the receiving hospital at the time of handover to ensure effective care and treatment.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- Staff understood the relevant consent and decision making requirements of legislation and guidance, including the Mental Capacity Act 2005 (MCA).
- The service had a version controlled, and within review date consent policy available for staff regarding capacity to consent which included reference to Gillick competence and the Mental Capacity Act (MCA, 2005) and Deprivation of Liberty safeguards. Gillick competence is a term originating in England and is used in medical law to decide whether a child (under 16 years of age) is able to consent to his or her own medical treatment, without the need for parental permission or knowledge.
- The service did not generally transport patients detained under section 136 of the Mental Health Act unless there was an associated acute illness or trauma that required urgent treatment. This is an emergency power, which allows people to be taken to place of safety from a public place if a police officer considers them to be suffering from a mental illness and need care.
- MCA training was included in the mandatory training. At the time of our inspection, 100% of staff had completed training.
- The clinical crews sought verbal consent for treatment, but made best interest decisions for patients unable to make decisions due to lack of consciousness or lack of mental capacity for example.

• Staff recorded consent on the patient report forms (PRFs), they also recorded if the patient was unable to consent due to illness or injury. Reasons for best interest decisions were recorded in the PRF and all of the records that we reviewed indicated the level of patient consent.

Are emergency and urgent care services caring?

- Staff understood and respected people's personal, cultural, social, and religious needs. They were respectful, considerate, and friendly in their interactions.
- Staff ensured that patients' dignity was protected during episodes of care and transfer to ambulances with the use of blankets where able.
- Pain relief was administered in a timely manner and regular checks on patient's pain levels were made.
- We did not observe relatives travelling in the air ambulance or accompanying patients in the road ambulance but staff reported that they would always try to facilitate this if possible. This depended on several factors such flight weight restrictions and limited space in the fuselage. The crew said they would always try to take the parent if the patient was a child, as long as this did not impact on the flight or treatment that may need to be carried out mid-flight. The pilot was accountable and made these decisions.
- Staff provided cards to indicate which receiving hospital they were transporting the patient to so this important information could be passed to relatives and loved ones.
- We observed staff providing reassurance to a patient who was concerned about their partner who was also being treated at the same time.
- The service was in the process of conducting a patient survey. Initial top line findings (based on a sample of 21 patients) were that 100% of participants said they were 'extremely likely' to recommend the Essex and Herts Air Ambulance to friends and family if they needed similar care or treatment. Of those who felt able to respond (i.e.

- were conscious or had been fed back information by friends or relatives), 100% said they would rate the overall care they received from the air ambulance crew as excellent.
- Patients and their relative's comments were overwhelmingly positive with comments such as; I'd never thought about what they do before but when you find yourself in that situation you realise what they do. I thought they were brilliant". "They were just very fast, efficient professional, they were on the ball. Absolutely brilliant, took me straight to hospital". "I couldn't fault any one at all, it was brilliant, extremely helpful". "They responded very quickly and appropriately and basically saved my life". "I can't speak highly enough of them. If they hadn't done what they had done, I wouldn't be here". "Because the team that arrived were very professional, knowledgeable, very calming, very efficient, were there very quickly and seemed to know what they were doing and were reassuring to me". "Professional, totally professional, from what I remember and what my wife and daughter told me". "They were so efficient and reassuring - everything was perfect".
- The service kept a 'Smile File' with letters and cards from grateful patients and relatives. The comments referred to the kindness and compassion shown by the staff.

Understanding and involvement of patients and those close to them

- We observed staff explaining treatment and procedures using plain English. They also checked that patients understood before proceeding with treatment.
- Staff kept patients and families well informed regarding the treatment taking place on the scene and the plan ahead. This included which hospital they would be transferred to. The staff liaised with police on scene, if required, to ensure that patient's next of kin was informed.
- EHAAT staff understood that an acute trauma episode affected both the patient and family members. They had identified that during these times, there wasn't always time to explain treatments provided or, in the case of death, families were often left with many unanswered questions about the care and treatment a loved one had received.

- The service recognised that there were some improvements they could make, and had introduced the patient liaison manager (PLM) role. The aim of this role was to visit patients and families, either in hospitals or at home, following attendance by an EHAAT crew to explain what care had been provided and 'fill in the gaps'. The PLM also signposted patients and relatives to other organisations who provide specialist support in the recovery phase of illness or injury.
- The two patients and one relative we spoke with on the telephone had all had contact with the PLM. They valued the contact as the patients remembered very little about their episode of care and they were very grateful for the 'missing bits' to be filled in.
- Information gathered by the PLM during conversations demonstrated that patients had more understanding in the care and treatment they had received. The PLM also gathered feedback from patients that was used to improve or adapt future care provisions such as patients feeling cold and needing additional thermal support.

Emotional support

- Staff provided support to patients and their family members during distressing events. We observed staff comforting patients and reassuring them by speaking in a calm and gentle manner. Patients told us that staff held their hand to help keep them calm and that this helped them during the stressful flight.
- The airbase chaplain and deputy were regular visitors to the base and offered non-denominational support or just a listening ear to all staff.
- EHAAT had a number of support mechanisms in place to support staff. At the weekly death and disability meetings staff discussed the challenging cases from the previous week, which staff felt, was a useful method of debriefing and reflecting on a case not just from a clinical perspective but also from a team welfare perspective. There was also a mobile social media 'resilience' group to offer assistance during major incidents
- We saw thank-you comments that specifically mentioned how much patients and relatives valued the on going support provided by the PLM following episodes of care, with comments such as "It's been very good. The patient liaison officer went out of his way to

- contact me". "He invited us as VIPs to go to the motorcycle run they did and has organised me meeting the doctor that treated me and going to visit the base. He's been really good".
- EHAAT does not transport the deceased. In cases where despite the best efforts of the clinical teams and their colleagues in the other emergency service the patient dies, they recognised death and fulfilled the legal requirements. We observed staff working with other emergency services to ensure the patient was treated with respect. We also observed the clinical crew offering support to the witness of a traumatic event.
- The trust awarded a trophy every December to the 'student clinician of the year'. The family of a young man who was treated by an EHAAT crew but sadly died funded this. The family gave the trophy to a student who exhibited the same values as their son. They went on to become friends and volunteers to the service and described the award process as having helped them to remember their son.
- Staff described visiting a child's funeral on request of the family, and the PLM was in close contact with a family whose son died following a traumatic injury. Staff described this as 'providing a conduit for them to express their grief and ask questions'.
- Staff were sensitive to the impact that care and treatment had on patients and those close to them, both physically and emotionally. They talked of examples where they had provided emotional support to relatives or people close to patients that had died on scene.
- We saw evidence of the trust sending remembrance notes to relatives on the anniversary of their death.

Are emergency and urgent care services responsive to people's needs?

Service planning and delivery to meet the needs of local people

• The service planned their service around the needs of the local population and was operational seven days

per week. The hours of operation were from 7am to 9pm using the air ambulance during daylight hours with the clinical crews transferring to the rapid response vehicle (RRV) at sunset until 9pm.

- Services were planned and delivered in collaboration with the local NHS ambulance service. The service was considering the feasibility of providing the service 24 hours per day to support the local NHS ambulance service.
- EHAAT continually monitored and explored how to meet the needs of the local population and delivered and planned new services based on unmet needs. For example the recent introduction of the use of RRVs from their other airbase to provide an evening service from 6pm to 2am on Friday and Saturday nights. This gave the NHS ambulance service an additional resource and the public an extra specialist clinical care team during identified busy periods. The service was investigating the possibility of extending its service to a 24 hour one.
- 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.
- EHAAT worked closely with air ambulances in London, Kent, Surrey, Sussex, and East Anglia to ensure full coverage of the areas where all services operate. In a major incident such as an explosion or train crash all the HEMS teams worked together with the local NHS ambulance service to help manage the triage and transport of multiple patients.
- The facilities and premises were appropriate for the services that were planned and delivered.

Meeting people's individual needs

- Staff received training in dementia awareness and learning disability awareness as part of mandatory training.
- The service did not always know what specific individual needs of a patient they would be responding to. The tasking NHS ambulance service would not always have detailed information. Clinical staff assessed patients on missions according to individual need and provided the care that was appropriate for them.

- EHAAT had access to a telephone translation service via the local NHS ambulance 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 also commented that they would use an online or mobile translation app if available and appropriate.
- 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 (morbidly obese) 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.

Access and flow

- Patients had timely access to urgent and critical care via the air ambulance service. The service had a direct electronic link to their tasking NHS ambulance service, this showed them the status of the aircraft, whether it was 'online' and ready for flight.
- The local NHS ambulance service critical care desk (CCD) tasked the service air ambulance. Critical care paramedics from the service, the NHS service, and other air ambulance service operated the CCD with a dedicated control room dispatcher for local air ambulances. This ensured that calls were triaged effectively and that the air ambulance was tasked appropriately.
- The service reported against 21 internal key performance indicators (KPIs) which it used to monitor targets. Many of these related to non-regulated activity such as charity finances. However, it did monitor some operational activity such as; available shifts covered, number of aircraft stand-downs, aircraft availability, number of missions per month, serious incidents, duty of candour incidents and operational and clinical

complaints. Senior staff monitored, and presented information about the KPIs in the monthly executive summary report, along with a range of information about the months' missions.

Learning from complaints and concerns

- The service did not report any complaints received during the reporting period January 2017 to January 2018. The last complaint recorded was pre 2010 and was for inadequate analgesia.
- The service reported that on occasion there had been some dissatisfaction with communication reported by the hospitals that they worked with; however, this was not recorded as a complaint. The medical director had instigated an investigation into communication concerns and there were plans to review the recording of the last 50 calls between clinical crews and hospital emergency departments to identify any learning.
- There was a policy and procedure for complaints. The clinical managers and patient liaison managers (PLMs) were the first to be contacted or become aware of any instances of complaint. They then notified the medical director (MD) and clinical director (CD), and ensured all complaints were recorded on the safety management system.
- There was a patient section on the service website that explained how a patient could provide feedback with a link to the complaints procedure and a downloadable copy of a patient guide that explained how to raise concerns or complain. There was also a link to an independent complaints advocacy service.
- The crewmembers carried patient guide leaflets and patient liaison contact cards with them and we observed staff providing these to patients and those affected by involvement of trauma incidents.

Are emergency and urgent care services well-led?

Leadership of service

 EHAAT was led by a chief executive who was accountable to a board of trustees. A clinical director who was also the registered manager, medical director, operations director, finance director and fundraising and marketing director formed the rest of the executive

- board. There were critical care paramedics (CCPs) who also performed the roles of operational manager, clinical manager for the Earls Colne airbase and patient liaison manager.
- The leaders had the skills, knowledge, experience, and integrity they needed for their roles. The executive team demonstrated a high level of strategic planning, and people management skills, they were very visible and approachable. The clinical leads all held the relevant trauma and pre-hospital emergency medicine qualifications and experience.
- Clinicians worked in a matrix structure. In addition to their paramedic responsibilities, some staff acted as champions for organisational initiatives such as the patient liaison service, roster management and overseeing of procurement of supplies and equipment. Other responsibilities were infection prevention and control and
- Staff spoke very positively about the senior management team and their leadership. They told us that all of the senior management team were approachable and they felt well supported. One staff member commented that the chief executive regularly attended the airbase and joined staff for coffee.
- During our discussions with senior management, they
 were complimentary about the skills and knowledge of
 their staff and had identified staff whom they felt had
 leadership potential.

Vision and strategy for this this core service

- The service vision was 'Provision of the highest quality pre-hospital life-saving service 24/7 in Essex and Hertfordshire'. The values to deliver the vision were; 'Innovative in driving forward best clinical practice, Dedicated because we care about the cause, our patients and each other, Trustworthy in working openly and honestly, Passionate in going the extra mile and Professional in treating everyone as they would wish to be treated'. All of the staff we spoke to were aware of the vision and values.
- The service had a clear strategy going forward, divided into clinical, operational, financial and partnership key objectives. There were identified plans to achieve those objectives with timelines, and key staff were involved in working towards the objectives.

• The EHAAT objectives were clearly developed. There was a progress log, which identified actions towards meeting the objectives, and those who were involved.

Governance, risk management, and quality measurement

- There was an effective governance framework to support good quality care. The service held regular senior management team meetings, which monitored progress on achieving strategic aims and fed back to the board of trustees.
- Monthly operational group meetings monitored progress on the operational strategy. The clinical and operation directors fed any information from the front line level, such as achievements or incidents, to the senior management team meetings.
- The service had recently set up a safety committee, which met for the first time in December 2017 with the intention of meeting monthly. The terms of reference demonstrated emphasis on the meeting to provide safety incident analyses and detailed discussion. We reviewed the minutes of the December 2017 meeting and saw that a selection of incidents were evaluated with staff allocation of actions as a result of the meeting.
- The service held a monthly open governance, audit, and training day that involved the wider NHS and emergency services they worked with.
- The service used an external team of advisors and an experienced team of pre-hospital consultants and professors to provide clinical governance and on-call telephone advice when required. They reviewed and audited activities in depth, discussed clinical effectiveness and shared ideas to improve the service and ensure the critical care team continued to provide best practice and safe patient care. In addition, the pre-hospital care consultants flew with the HEMS team regularly to supervise practice and ensure their own competencies and this included the medical director.
- EHAAT held weekly death and disability team (D and D) meetings at their other airbase location. All clinical staff from both locations were invited. This included weekly case reviews, led by the external advice team or the pre hospital consultants as part of dedicated governance and learning forum. It examined whether compliance to standard operating procedures (SOP's) was followed

- and if any appropriate deviation was justified. Learning outcomes were generated and recorded from each case review. A conference camera allowed remote access to consulting clinicians.
- The service monitored staff attendance at D and D and clinical governance meetings and recorded attendance as a percentage per staff member. Non-attendance was flagged red and staff were invited to address this. At the time of inspection, the service funded staff to attend one session per month if on a day off, but was planning to extend the rotas to enable more regular attendance going forward.
- The service used a 'team read file' for dissemination of important information such as safety updates and new policy or SOP updates. This process meant that all members of the clinical team were required to confirm that they had read vital information or safety updates. The team read file was a standardised, auditable way of ensuring any important information was sent and reviewed by all.
- The service participated in quarterly strategic meetings with the local NHS ambulance service and monthly with the East of England Trauma Network. We reviewed the meeting minutes and saw they addressed issues that involved all parties and included actions moving forward.
- The service had a corporate risk register that was in the process of being migrated to a newer more responsive and comprehensive register. We saw that the service identified and recorded risks on a register although they did not always have risk identification and update dates and there was no differentiation between operational and clinical risks. They took action to mitigate risks, and formulated action plans that were taken to the board. The new risk register was more in keeping with that of the local NHS ambulance service with a grading system.
- Senior staff commented that they had been through a period of prolonged and extensive change over the past three years and were preparing for the coming year (2018) to be a period of embedding and consolidation.

Culture within the service

- The culture within the organisation was particularly supportive and positive. Staff from the most senior, to the most junior posts were passionate about the service provided with some having left very secure roles within the NHS to work at the service.
- We observed staff on emergency missions and they displayed their passion and commitment to the work and to the organisational values.
- Staff spoke of an open door culture and of the organisation as being 'a family'. All of the staff told us they felt comfortable reporting any concerns and always felt supported. Staff told us the senior management team dealt with any problems quickly and described the environment as proactive to work in.
- Staff were very positive about their level of involvement in decision making and said they felt involved and listened to. Senior managers encouraged staff to develop ideas for improvements.
- The service had an open and learning culture, focused on patient care. Staff had mutual respect, for each other and their roles. The same staff worked across the two air ambulance location/airbases, and this ensured a consistency of approach.
- The learning culture was embedded, and supported by weekly death and disability meeting events. Staff also used the daily air ambulance briefing sessions to review an SOP or policy. All staff were invited to participate.
- The service hosted monthly learning events and there
 was an open invite to external clinicians with an interest
 to attend. EHAAT funded staff to attend one learning
 event per month if it did not occur on a normal working
 day. This meant that despite small teams on duty daily,
 all staff had access to learning opportunities.
- The organisational culture promoted staff wellbeing.
 Colleagues or managers debriefed clinicians after their missions and we saw evidence of peer support.
- The service worked together with two other local air ambulance services in the area to establish a charter (The McQueen Charter) to support positive mental health and wellbeing to the staff.
- EHAAT recognised that that some missions could be distressing for staff and it was obvious that staff

supported each other. There was a strongly supportive culture from the most senior level down and staff had access to both the chaplain and an independent counselling service.

Public and staff engagement

- The service had a team of around 300 dedicated volunteers with varied roles that included talks and presentations, community tin collections, event attendance, helping in service offices and charity shops. The volunteers were considered an integrated part of the service without which the service would not be able to operate.
- The service was supported by a team of fundraisers from the charity side of the organisation who were proactive in seeking engagement opportunities with the public.
- The service regularly updated its internet website with current news about the service. It also included areas with information about the current clinical activity and volunteer information.
- The service used social media to connect with the public and health professionals alike.
- The service launched the visitor centre at the Earls
 Colne airbase in July 2011. Tours were available and
 included a presentation giving visitors an insight into
 the work of the charity. This included a guided tour of
 the visitor centre and the opportunity of seeing the
 helicopter and meeting the crew, subject to operations.
 The tours were open to individuals, families, schools,
 groups and corporates and were booked through the
 fundraising team in advance.
- Staff encouraged local groups to attend the airbase to learn more about the service they provided and we saw multiple examples of where patients and their families were invited to meet the clinical and aircrews involved in their care at the airbase.
- The service routinely requested feedback from all patients they transported and left a card with patients and relatives with the patient liaison manger contact details.
- On 25 June 2017, the service held a Celebration Event and Family Fun Day at a local venue to celebrate 20 years of saving lives and to launch the newly branded fleet. Staff and public were invited and treated to a look

at the new helicopter purchased by the service before it undertook a week long promotional tour. The tour used free flying hours, from the specialist aviation service that provided pilots for the service, to fly to 20 local locations to give people the opportunity to meet the aircrew and see the helicopter. No clinical missions were compromised by this as the helicopter could not go operational until all training and conversion had been completed.

• The service produced a quarterly magazine (Flight for Life) with updates on; what was happening in the organisation, charity fundraising, recent events, new staff, volunteer activity, and personal stories from grateful patients and relatives.

Innovation, improvement and sustainability

- EHAAT were working towards accreditation with the Intercollegiate Board for Training in Pre-Hospital Emergency Medicine (PHEM). PHEM is a new sub-specialty area of medical practice focusing on the specialist provision of on-scene and in-transit critical care and will allow a further recruitment pathway for Doctors and provide a platform to train and nurture the clinicians of the future.
- EHAAT have developed two dedicated Patient Liaison Managers (PLMs) to liaise with patients and their families and provide opportunities to ask questions about the care they received during their EHAAT attendance. The PLMs also sign-posted them to relevant support organisations in the community and enabled EHAAT to informally gather patient and family feedback about the pre-hospital care they provided as well as build on the good relationships with NHS Trusts and trauma networks.

- The service received two awards at the 2017 Association of Air Ambulance Awards of Excellence. One of the paramedics received Air Ambulance Paramedic of the Year and the other award was for Innovation of the Year for the Minds Matter conference.
- EHAAT ran an international student elective programme. This fed into its research and audit portfolio. The ability to recruit medical/paramedic/nursing students from around the world helped continue a regular stream of research and audit, much of which has been presented nationally and internationally. This led to the formation of the Cambridge University Pre-Hospital Care Programme, which is now a regionally delivered, internationally streamed academic teaching programme with the aim of increasing interest in pre-hospital emergency medicine.
- EHAAT were investing in a partnership with a local university to provide a Post-Doctoral Research Fellow post. This was a full time position with oversight responsibility of all EHAAT research and defined research pathways to allow them to accurately target and evidence future care and expansion.
- The service have also developed school ambassadors and commenced a school cardio pulmonary resuscitation (CPR) programme to teach children the basics of resuscitation. This was in recognition that four of every five cardiac arrests that happen out of hospitals occur in the home and children are often the only person available.
- The service identified a number of innovations that it planned to introduce in the coming year. These included; extending operating hours for the critical care rapid response vehicles to 24 hours per day, and the introduction of pre-hospital ultrasound.

Outstanding practice and areas for improvement

Outstanding practice

- The staff's passion and commitment for the work that they did, from the most senior to the most junior post, was exemplary.
- The EHAAT Clinical Governance Day was a monthly open forum governance day that included open access for emergency service staff and the wider NHS. It was both a training and clinical professional development (CPD) event but also provided an open forum where EHAAT presented clinical missions for scrutiny and audit by healthcare partners.
- EHAAT hosted an annual aeromedical conference and in 2017, the theme was 'Minds Matter'. This was free to pre-hospital medicine health professionals and focused on the stress and mental health of clinicians involved in pre hospital care. We saw feedback from delates who attended the conference, which was entirely positive.

- The introduction of the patient liaison manager role enabled patients to gain important information about the treatment they had received and provided support and signposting to both patients and families.
- The service provided medical students with opportunities to gain experience through a placement scheme.
- Staff performed regular simulation exercises using a wide range of equipment and scenarios based on real life incidents to embed learning and ensure clinical competencies were practiced and updated.