

Kent, Surrey & Sussex Air Ambulance Trust Kent, Surrey and Sussex Air Ambulance Trust Headquarters 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

Kent, Surrey and Sussex Air Ambulance Trust is operated by a registered charity that provides emergency and urgent care treatment for patients in Surrey, Sussex, Kent and the surrounding areas. A team of doctors and paramedics deliver time-critical medical care. Clinical staff respond to patients predominately by helicopter but also use a response vehicle in the event the crew cannot deploy by air.

We inspected this service using our comprehensive inspection methodology. We carried out the inspection on 19 and 20 March 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:

- People were protected by a strong comprehensive safety system, and a focus on openness, transparency and learning when things went wrong. All staff we spoke with were open and transparent, and fully committed to reporting incidents and near misses.
- Staff maintained standards of cleanliness and hygiene throughout the areas where medical care took place and there were reliable systems to protect people from infections. In particular, staff effectively maintained standards of cleanliness and hygiene when decontaminating uniforms.
- The service ensured that medicines were appropriately and safely ordered, stored, administered and disposed of and all medicines were secured, in date and accurately recorded. There was clear guidance on medication use.
- The station environment was properly designed and fit for purpose. All vehicles and storerooms were visibly clean and tidy. The service had access to advanced technical equipment, which was safely and securely stored.
- Comprehensive risk assessments were carried out in line with service policy and national guidance and staff identified and responded appropriately to the changing risks to people who used the services.
- Staffing levels were planned, implemented and reviewed to keep people safe at all times. Dual roles meant any staff shortages were responded to quickly and adequately and staff had adequate breaks between shifts.
- People's care and treatment was planned and delivered in line with current evidence-based guidance, standards, best practice and legislation. Standard operating procedures reflected up to date and relevant legislation and evidence based guidance.
- Information about people's care and treatment, and their outcomes, was routinely collected and monitored. This follow up information was used to improve care.
- Staff had the right qualifications, skills, knowledge and experience to do their job. The learning needs of staff were identified and training was put in place to meet those learning needs.

Summary of findings

- When people received care from a range of different staff, teams or services, this was coordinated and there were agreed care pathways with other providers to ensure patients were treated in a way to achieve the best outcome.
- Staff worked collaboratively to understand and meet the range and complexity of people's needs. All staff, including those in different teams and services were involved in delivering care and treatment.
- Feedback from people, who used the service, was continually positive and showed staff had demonstrated encouraging, supportive and compassionate care.
- There was a strong, visible, person-centred culture. Staff we spoke with were highly motivated and inspired to offer care that was kind and promoted people's dignity.
- Staff understood the impact that a patient's care, treatment or condition had on their wellbeing both emotionally and socially and family and relatives were supported during distressing events.
- Information about the needs of the local population was used to inform how services were planned and delivered.
- Staff were competent and understood the importance of taking into account the differing needs of patients. Staff had taken part in a variety of published research projects to respond to the needs of patients.
- The service had an effective rapid dispatch process and dispatchers prioritised care and treatment for people with the most urgent needs using an effective tasking system.
- Patients were enabled to make a complaint or raise concerns and were given the help and support they needed to make a complaint. Lessons were learned and action was taken as a result to improve quality of care.
- The service had a clear vision with quality and safety the top priority. There was a robust and realistic strategy for achieving the vision and delivering good quality care.
- There was an effective governance framework. The board and other levels of governance within the organisation functioned effectively and interacted with each other appropriately. Leaders and staff were focused and committed to continuous learning and improvement.
- There was a positive culture throughout the service. Staff were proud of the organisation as a place to work and staff felt respected and valued. Leaders had the capacity, capability and experience to lead effectively and encouraged appreciative and supportive relationships between staff.

Amanda Stanford

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

Rating

Emergency and urgent care services

ing Why have we given this rating?

This service was a Helicopter Emergency Medical Service (HEMS) that provided 24-hour rapid emergency and urgent intervention, to the critically injured and severely ill patient. The service was well led with experienced and capable leaders who drove improvements in the service with a focus on providing the best possible care. The leaders promoted a positive staff culture and encouraged staff development. There was a clear proactive approach to seeking out and embedding new and more sustainable models of care to improve patient outcomes. Effective systems were in place to make sure patients received safe and high quality care and treatment at all times.



Kent, Surrey and Sussex Air Ambulance Trust Headquarters Detailed findings

Services we looked at Emergency and urgent care

Detailed findings

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Background to Kent, Surrey and Sussex Air Ambulance Trust Headquarters

Kent, Surrey and Sussex Air Ambulance Trust is operated by a registered charity. The service was founded in 1989. It is an independent air ambulance service based in Redhill. The service primarily serves the communities of the Kent, Surrey and Sussex area.

The service was founded and the charity was established in 1989 under the name of Kent Air Ambulance. In 2011 Kent Air Ambulance became Kent, Surrey and Sussex Air Ambulance Trust. The services were managed from their headquarters in Kent and all operations took place at their Redhill base. The Redhill base housed two helicopters and four response vehicles. The service had a service level agreement with an NHS ambulance trust. Kent Surrey and Sussex Air Ambulance Trust dispatchers managed the HEMS dispatch desk which was based within the NHS ambulance trust's emergency operations centre.

The service has had a registered manager in post since 2011 and has been registered with the Care Quality Commission since 2011.

Our inspection team

The team that inspected the service comprised a CQC lead inspector, one other CQC inspector and one assistant inspector. The inspection team was overseen by Catherine Campbell, Head of Hospital Inspection.

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Effective	
Caring	
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Responsive	
Responsive	
Well-led	
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Overall	

Information about the service

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

The service is registered to provide the following regulated activities:

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

During the inspection, we visited their base at Redhill Aerodrome. We spoke with 12 members of staff including; registered paramedics, pilots and management. We spoke with one patient and 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 has been previously inspected and the most recent inspection took place in September 2013, which found that the service was meeting all standards of quality and safety it was inspected against.

Activity (January 2017 to January 2018)

- In the reporting period, from January 2017 to January 2018, the service responded to 1,496 patients. The most common type of call was road traffic collisions and the most common injury was a head injury.
- The provider employed 15 registered paramedics, 10 doctors, 14 pilots and dut. The service also had a pool of

temporary staff it could use. The pool of temporary staff was made up of 11 doctors and 14 paramedics. The registered manager has executive accountability for controlled drugs (CDs).

Track record on safety (January 2017 to January 2018)

- The service had not reported any never events, during the reporting period, from January 2017 to January 2018. Never events are serious, wholly preventable, patient safety incidents that should not occur if a service has implemented the available preventative measures. The occurrence of a never event could indicate unsafe practice.
- The service had not reported any serious injuries during the reporting period, from January 2017 to January 2018
- The service reported 216 clinical incidents. Of these, 56 resulted in no harm, one low harm, and one moderate harm. No incidents during the reporting period resulted in severe harm or death.
- The service had reported two informal complaints, during the reporting period, from January 2017 to January 2018.

Summary of findings

We found the following areas of good practice:

Safe:

- People were protected by a strong comprehensive safety system, and a focus on openness, transparency and learning when things went wrong. All staff we spoke with were open and transparent, and fully committed to reporting incidents and near misses.
- Staff maintained standards of cleanliness and hygiene throughout the areas where medical care took place and there were reliable systems to protect people from infections. In particular, staff effectively maintained standards of cleanliness and hygiene when decontaminating uniforms.
- The service ensured that medicines were appropriately and safely ordered, stored, administered and disposed of and all medicines were secured, in date and accurately recorded. There was clear guidance on medication use.
- The station environment was properly designed and fit for purpose. All vehicles and storerooms were visibly clean and tidy. The service had access to advanced technical equipment, which was safely and securely stored.
- Comprehensive risk assessments were carried out in line with service policy and national guidance and staff identified and responded appropriately to the changing risks to people who used the services.
- Staffing levels were planned, implemented and reviewed to keep people safe at all times. Dual roles meant any staff shortages were responded to quickly and adequately and staff had adequate breaks between shifts.

Effective:

• People's care and treatment was planned and delivered in line with current evidence-based guidance, standards, best practice and legislation. Standard operating procedures reflected up to date and relevant legislation and evidence based guidance.

- Information about people's care and treatment, and their outcomes, was routinely collected and monitored. This follow up information was used to improve care.
- Staff had the right qualifications, skills, knowledge and experience to do their job. The learning needs of staff were identified and training was put in place to meet those learning needs.
- When people received care from a range of different staff, teams or services, this was coordinated and there were agreed care pathways with other providers to ensure patients were treated in a way to achieve the best outcome.
- Staff worked collaboratively to understand and meet the range and complexity of people's needs. All staff, including those in different teams and services were involved in delivering care and treatment.

Caring:

- Feedback from people, who used the service, was continually positive and showed staff had demonstrated encouraging, supportive and compassionate care.
- There was a strong, visible, person-centred culture. Staff we spoke with were highly motivated and inspired to offer care that was kind and promoted people's dignity.
- Staff understood the impact that a patient's care, treatment or condition had on their wellbeing both emotionally and socially and family and relatives were supported during distressing events.

Responsive:

- Information about the needs of the local population was used to inform how services were planned and delivered.
- Staff were competent and understood the importance of taking into account the differing needs of patients. Staff had taken part in a variety of published research projects to respond to the needs of patients.

- The service had an effective rapid dispatch process and dispatchers prioritised care and treatment for people with the most urgent needs using an effective tasking system.
- Patients were enabled to make a complaint or raise concerns and were given the help and support they needed to make a complaint. Lessons were learned and action was taken as a result to improve quality of care.

Well-led:

- The service had a clear vision with quality and safety the top priority. There was a robust and realistic strategy for achieving the vision and delivering good quality care.
- There was an effective governance framework. The board and other levels of governance within the organisation functioned effectively and interacted with each other appropriately. Leaders and staff were focused and committed to continuous learning and improvement.
- There was a positive culture throughout the service. Staff were proud of the organisation as a place to work and staff felt respected and valued. Leaders had the capacity, capability and experience to lead effectively and encouraged appreciative and supportive relationships between staff.

Are emergency and urgent care services safe?

Incidents

- The service had not reported any never events, during the reporting period, from January 2017 to January 2018.
- The service had not reported any serious injuries during the reporting period, from January 2017 to January 2018
- The service had not reported any liability claims, during the reporting period, from January 2017 to January 2018.
- The service had a comprehensive incident reporting and investigation standard operating procedure. This was in date and had a review date. The policy described the varying levels of incidents and the importance of reporting all of them. The policy made specific reference to robust investigation and the 'importance of continuous learning'. The policy reflected national professional guidance, for example, the NHS England Serious Investigation Framework – Supporting learning to prevent recurrence 2015.
- The service used an electronic incident reporting system. The system was available on a range of devices including tablet devices and personal computers. The system automatically alerted the duty manager when staff had recorded an incident. This enabled the manager to address any incidents as staff reported them.
- All staff we spoke with understood the system and used it consistently. We saw that accident and incident reporting was part of mandatory training. All staff had completed and were up-to-date with this training.
- The service reported 498 incidents during the reporting period, from January 2017 to January 2018. Of these, 216 were clinical incidents, 172 were non-clinical incidents and 55 were safeguarding referrals (that the service also recorded as incidents).

- The level and quality of incident reporting showed the levels of harm and near misses. Of the clinical incidents, 158 were near misses, 56 resulted in no harm, one low harm, and one moderate harm. No incidents during the reporting period resulted in severe harm or death.
- Staff were fully committed to reporting incidents and near misses. The high rate of incidents reported as near misses and no harm (99%) showed staff had an open and honest reporting culture where incident reporting was encouraged and fully embedded.
- The service did not underestimate near misses and assigned the adequate level of investigation to avoid repetition. Managers rated incidents that did not result in any harm according to their potential impact and investigated them accordingly. This system categorised incidents based on the potential level of harm against the likelihood of recurrence. Each incident was categorised as low, moderate, significant or high using a risk assessing system.
- The service had a robust knowledge of incidents and paid attention to the monitoring and identification of incident trends. Incidents were easily categorised into 11 location areas, for example, day shift incidents at Redhill and night shift incidents at Redhill. These incidents were further categorised by type of incident. This meant the service could easily identify if there was an increase in a type of incident in a particular area.
- The service clearly reported, managed and identified learning from incidents. We reviewed three incident reports. These clearly showed the service had carried out thorough investigations, key findings and action plans in a timely manner.
- Staff were able to tell us things that had changed because of an incident. For example, an incident had been reported because a member of staff had not worn eye protective equipment during airway management of a patient. There had been a change to the pre-procedure checklist that had incorporated a check to ensure all members of staff managing an airway were to wear eye protection and a facemask.
- There was an open culture where all incidents raised by staff were highly valued. The most recent staff survey showed that 93% of staff had reported the last incident they witnessed or knew their colleague had reported it.

The Executive Director of Service Delivery and the four duty managers reviewed all incidents in a weekly team call. All staff we spoke with told us they always received feedback on incidents they had raised.

- The service designed the governance structure to ensure incidents received the appropriate level of review and investigation. Once staff raised an incident report, the duty manager assigned a risk score using a risk matrix. Staff managed incidents that scored below seven locally. The duty manager placed incidents that scored above seven into an investigation timeline that was monitored through the incident reporting system and involved all members of staff related to the incident.
- The service encouraged staff to raise concerns with their colleagues to reduce the likelihood of incidents occurring. Crew resource management training gave staff the skills to challenge colleagues in a controlled way so that more junior staff felt empowered to challenge senior staff. The staff called this 'free challenge'. The Executive Director of Service Delivery told us it was important everyone had an equal voice.
- All staff were encouraged to participate in learning to improve safety as much as possible. Incidents were a standing agenda item at governance days where staff discussed all incidents reported over the previous two weeks. Staff talked through all incidents and identified learning together as a team. Governance leads shared learning using team meeting minutes and emails.
- All staff were genuinely committed to sharing experiences and identifying incidents together. During our inspection, we saw staff return from jobs and immediately open discussion to the team. Staff discussed the details of the call, systematically, so the team could collectively identify incidents. Individual teams attended their own governance days to review incidents but they also attended joint governance review days where teams could share learning with each other.
- The service encouraged cross provider incident reporting. If the service raised any incidents relating to the NHS ambulance trust, they would share this incident with them and request learning and actions to be communicated back. The Executive Director of Service Delivery sat on the quality assurance group of the NHS

ambulance trust where they jointly shared learning. The service also arranged and took part in joint debriefs of complex jobs. All learning was cascaded to staff that were not present.

- Other external organisations were actively engaged in assessing and sharing learning from incidents. The service shared learning widely within the trauma network. The service had links with multiple major trauma centres across the South East of the UK. The service governance leads all held positions within these networks. A major trauma centre is a specialist hospital with consultants who have expertise in the treatment of the most severely injured patients.
- At the time of our inspection, the Chief Executive of the service chaired the South West London and Surrey Trauma Network where Kent, Surrey and Sussex Air Ambulance Trust was a network partner. These links enabled the service to learn and share learning on a wider scale to improve patient care.
- 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.
- The service had reported no incidents that required the application of duty of candour, during the reporting period, from January 2017 to January 2018. We spoke with three members of staff who were all aware of the duty of candour and told us about training they had received called 'Being Open'. The training had specific learning outcomes; to raise awareness of what it meant to be open, to show staff how to communicate in the right way in the event of a patient safety incident and how to access support when things went wrong.
- The incident reporting and investigation policy clearly explained the service commitment to duty of candour. The policy also referenced the National Patient Safety Agency (NPSA) document, Being Open: Communicating patient safety incidents with patients and their carers (2009).

- Staff received up-to-date training in all safety systems, processes and practices. Staff were required to complete 19 areas of training, including, bullying and harassment, moving and handling and principles of health and safety.
- Staff completed all mandatory training online. The online training system linked with electronic staff records. When a module was completed, the staff records were automatically updated to reflect this.
- Kent, Surrey and Sussex Air Ambulance Trust were responsible for the monitoring and delivery of training and had efficient oversight of staff training compliance. Senior staff maintained oversight with the use of a red, amber and green system. Red reflected overdue training, amber reflected training due and green reflected training completed. This meant that senior staff could clearly see when training was due and when it had taken place. Staff repeated mandatory and statutory training annually.
- Electronic staff records were programmed to alert staff and management when training was due. This meant staff could monitor compliance effectively. Staff also told us management gave them time to complete training when it was due. Managers effectively monitored training compliance during weekly operational calls to ensure they had sufficient oversight and could support staff to complete any outstanding training.
- We reviewed the electronic staff training records for 70 members of staff. We saw that 69 out of 70 members had completed and were up to date with all 19 areas of statutory and mandatory training. One staff member had one training session outstanding after being abroad on another training course. Within one week of our inspection, this staff member completed the training and the data showed all staff had completed 100% of the outstanding training.
- Four members of staff told us the mandatory training was effective in delivering the learning outcomes.
- Staff were suitably trained to carry out manual handling activities. Mandatory and statutory training included manual handling training for both clinical and non-clinical staff. The electronic training record showed that 100% of staff had completed and were up to date with this training.

Mandatory training

- The service did not list conflict resolution as part of their statutory and mandatory training. Staff told us that governance leads incorporated this training into scenario-based training, during governance days. This was delivered under more realistic circumstances to replicate the unpredictability associated with conflict. All staff we spoke with felt the conflict resolution training was delivered effectively. Although staff had not needed to use conflict resolution, they felt confident they had the skills to manage it.
- The service ensured paramedics were appropriately trained to drive under blue lights. The service required all staff to have completed training by the local police driver-training unit. This assessed driving standards and blue light driving. The training unit repeated this training, every three years, to ensure staff remained competent.
- The service had oversight of driver training compliance. Service data showed that 83% of paramedics had received this training. Although the remaining 17% had been booked for training, they were not authorised to drive service vehicles until this training was complete.

Safeguarding

- There were clearly defined and embedded systems, processes and standard operating procedures to keep people safe and safeguarded from abuse. The service had a safeguarding standard operating procedure and policy. This was in date and had a review date. The policy clearly defined the roles and responsibilities of staff relating to safeguarding and the reporting procedure.
- Training for safeguarding vulnerable adults, children and young people was effective and up to date. All clinical staff were trained to level three in safeguarding children. This was in line with the intercollegiate document Safeguarding Children and Young People: Roles and Competencies for Health Care Staff (2014). All staff were trained to level one in safeguarding vulnerable adults. There is no national guidance on what level staff should be trained to, for safeguarding adults.
- At the time of our inspection, compliance with safeguarding training was 100%. Although pilots did not have direct contact with patients, they were trained to

level one in safeguarding for both adults and children. This was to ensure they had a good understanding of the service commitment to safeguarding adults and children from abuse.

- The training modules delivered up to date information and awareness on current safeguarding issues. For example, radicalisation by extremist groups and the risks a child may face online.
- The policy also included appendices that provided further detailed information on abuse that affected both adults and children, for example, female genital mutilation (FGM), forced marriage and domestic abuse. These appendices included facts and data to show the extent of abuse that had been reported within the UK. This meant that staff had an understanding of how prevalent these types of abuse were and reinforced their responsibility in identifying them.
- The safeguarding policy referenced multiple relevant sources of guidance and legislation, such as The National Institute for Health and Care Excellence (NICE) guideline CG89, Child maltreatment: when to suspect maltreatment in under 18s and the Safeguarding Vulnerable Groups Act 2006.
- Staff we spoke with understood their responsibilities and adhered to safeguarding policies and procedures. Staff focused on early identification of safeguarding concerns and could tell us the varying types of abuse and the signs or indicators that could be present when abuse was taking place.
- There were effective systems to raise safeguarding concerns. Safeguarding forms were available online and staff knew how to access and use them. The duty manager reviewed every safeguarding form to ensure staff had filled them out correctly. When staff completed a patient clinical record, the system recognised if the patient was under 18. Before closing the form, the system would prompt the user to consider any safeguarding concerns.
- Staff took a proactive approach to safeguarding. The service completed 55 safeguarding referrals to the commissioning NHS ambulance trust during the reporting period, from January 2017 to January 2018. Staff knew the importance of flagging those concerns so the relevant authorities could build a comprehensive picture of risk to the patient.

- The process for identifying abuse was reliable and minimised the potential for error. During our inspection, we saw a crew return from a job and immediately open up discussion to the team about the patient and a potential safeguarding concern. The team all sat down and discussed the job systematically. The team included paramedics, consultants, the pilot and the duty manager. All members of the team gave their opinion and decided together whether a safeguarding referral was appropriate.
- Staff could identify the safeguarding lead as the Executive Director of Service Delivery, who had board level responsibility for safeguarding. Staff could also identify the assistant director of service delivery as the safeguarding lead manager who was responsible for safeguarding across the organisation. Staff told us they were able to go to either lead to discuss any concerns they had.
- There was active and appropriate engagement in local safeguarding procedures and effective work with other relevant organisations. Staff escalated safeguarding concerns through the commissioning NHS ambulance trust. The system automatically emailed the commissioning NHS ambulance trust and the assistant Director of Service Delivery was responsible for ensuring acknowledgments were received. The commissioning NHS ambulance trust was responsible for raising safeguarding concerns with the local safeguarding board for investigation.
- The service regularly communicated with the safeguarding team at the commissioning NHS Ambulance trust. The safeguarding team gave Kent, Surrey and Sussex Air Ambulance Trust feedback that they were raising safeguarding concerns appropriately and successfully.

Cleanliness, infection control and hygiene

- Staff maintained standards of cleanliness and hygiene throughout the areas where medical care took place. Crews made sure that vehicles and equipment were clean and ready for use. All vehicles, aircraft and equipment were cleaned after each patient use and deep cleaning of all vehicles was scheduled both weekly and monthly.
- Cleaning was effectively monitored. The cleaning schedule was monitored through the electronic

compliance system. This system showed when vehicles, aircraft and equipment were last cleaned and when they were next due. This was monitored by the duty manager.

- Cleaning audits were carried out monthly using swabbing. Testing equipment presented a score that showed the level of organic matter present in the swab. An area of a vehicle or equipment was swabbed both before and after cleaning. This meant that not only was the equipment and vehicle cleanliness monitored, but so was the standard of cleaning carried out.
- Staff maintained cleanliness of vehicles and aircraft throughout the course of their shift. Staff told us they used wipes for disinfection and cleaning of non-invasive medical devices and surfaces. These wipes were effective against most bacteria and viruses, including methicillin-resistant Staphylococcus aureus (MRSA), Tuberculosis (TB), Norovirus and Hepatitis B and C. MRSA is a type of bacterial infection that is resistant to many antibiotics and capable of causing harm to patients. TB is an infectious disease that generally affects the lungs. Norovirus is a highly infectious group of viruses that cause diarrhoea and vomiting. Hepatitis B and C are viral infections that cause
- Sterile consumables were stored correctly and safely. We checked 30 sterile consumables. All 30 were sealed and in date. All consumables were kept in lidded boxes to prevent dust contamination.
- Staff received effective training in infection and prevention control and knew their responsibilities in relation to it. This training was delivered and tailored to both clinical and non-clinical staff. The modules covered the varying infection risks to patients and the ways those risks could be reduced. This training had been completed by 100% of staff and was refreshed yearly.
- The service had a comprehensive infection prevention and control standard operating procedure. This was in date and had a review date. The procedure clearly described the importance of personal and hand hygiene. We also read sections specific to personal protective equipment such as gloves and aprons. The policy reflected national professional guidance. This included, the Department of Health Saving Lives: reducing infection, delivering clean and safe care (2007).

- The service had an infection prevention and control lead. Staff we spoke with knew who this person was and told us they were able to go to them for advice and support.
- Staff had access to personal protective equipment. Personal protective equipment was personal issue and included a variety of infection control items such as facemasks and eye protection.
- 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 NICE guideline QS61, Infection prevention and control - Hand decontamination.
- During our inspection, we did not observe any patient journeys so we were unable to observe if staff were compliant with hand hygiene. Staff were issued with personal hand cleaning foam that they kept on their person at all times. Staff also had personal issue sterile gloves and examination gloves.
- 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. Patients were usually suffering from severe injuries or critical illnesses and were often unconscious or in significant pain. These patients were not in a position to tell crews specific infection information. Any ability to communicate was used to gain information that enabled time critical interventions to save life or limb. However, staff told us they routinely used full personal protective equipment including eye protection and facemasks, and these were incorporated into checklists to ensure they were being used.
- Staff effectively maintained standards of cleanliness and hygiene when decontaminating uniforms. When responding to a call, staff exited the base through the 'clean' door and returned after a job through the 'dirty' door. This was so that staff could decontaminate themselves and their uniforms.

- Staff returned through the dirty door into a dirty room with uniform cleaning facilities. The dirty room was an area that staff could remove contaminated uniform to avoid spreading any bacteria or infectious material through the base.
- The dirty room contained two industrial washing machines. These machines contained a dosing system that dispensed the correct amount of washing solution and maintained high water temperatures to decontaminate uniforms effectively. These systems could effectively decontaminate against MRSA.
- Staff entered the dirty room, removed their contaminated uniforms and placed uniforms in the washing machines. Staff then put on a forensic suit and entered the showers before returning to their lockers in the clean area to put on clean uniform.
- The arrangements for managing waste and clinical specimens kept people safe. Waste segregation and the disposal of sharps was covered in the infection prevention and control standard operating procedure. All clinical waste was appropriately disposed of. All kit bags contained clinical waste bags and a sharps bin. The area where clinical waste was stored was clean, tidy and secure. An external contractor was responsible for the final collection of clinical waste.

Environment and equipment

- The design, maintenance and use of the premises kept people safe. The design of the building considered flow of activity. The area closest to the aircraft was considered the 'hot' zone. This was where the HEMS calls were received, where pilots made flight safety decisions and where crews prepared to deploy. The area further away from the aircraft was considered the 'cold' zone. These were areas where staff could relax such as the kitchen and rest rooms. These areas were not physically marked but hot areas were designed to avoid distraction and cold areas were designed to be more relaxing.
- The station environment was properly designed and fit for purpose. There was a green walkway throughout the premises to ensure non-operational staff could clearly see where they were permitted to walk. We saw that

walkways were designed to go around the operational room so that operational staff could avoid being interrupted when personnel were moving from one end of the building to the other.

- The service ensured that all vehicles had current MOTs, services and insurance certificates. There was an assigned folder for each vehicle in the electronic database. This folder included all servicing and MOT details. The system alerted the operational support team when vehicle checks were due. During our pre-inspection checks, we found all four response cars had up to date MOT and insurance certificates and servicing was up to date.
- 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.
- Equipment stores were visibly clean and tidy. The storeroom was well lit and the floor was clear of any obstruction. There was no clutter or equipment out of place. The storeroom was large, making it easy and convenient to enter and select equipment. There was also a large table where staff could place kit bags that required re-stocking.
- Equipment stores were very well organised. Items in the equipment re-stocking room were clearly stored according to their use. All equipment was stored on labelled shelves within labelled transparent boxes. For example, airway equipment was stored on blue shelves and paediatric equipment was stored on white shelves. This made it easy and clear for the crew or operational support team to select and restock bags or vehicles. We also saw that labels on boxes clearly displayed the expiry dates of equipment so that operational support staff could easily keep track of stock expiry dates.
- The service effectively managed replenishment of vehicles, equipment and supplies. These were part of the operational support staff daily checks. Staff completed a checklist on an electronic tablet so there was a record that all checks had been completed. We saw the operational support staff checking kit bags to ensure they were replenished effectively; this was completed methodically and meticulously.

- Vehicles keys were securely stored. They were kept in a locked safe secured by a key code. Only operational staff and service support staff knew this code. This was closed and locked during our inspection.
- The maintenance and use of equipment kept people safe. The service held up-to-date records of equipment maintenance and schedules. Each piece of equipment held its own folder within the electronic system. This listed the servicing logs and due dates. We reviewed these logs, which showed all servicing was up-to-date. The system alerted the operational support team when equipment servicing was due.
- Equipment was available to secure patients safely while they were being conveyed. We saw seatbelts were present with a pull extension to fit around patients of varying sizes, including children. The safety restraint of patients within the aircraft was a requirement of the Civil Aviation Authority. Adult harnesses could be adjusted to accommodate children as young as two years old. Children below the age of two would travel in the arms of an adult, who was harnessed. Patients were not transported in response cars.
- Medical devices were effectively maintained and the quality of service was assured. The service had a comprehensive medical device management standard operating procedure. This was in date and had a review date. The policy clearly described the training, maintenance and replacement of medical devices. The policy reflected national professional guidance, for example, The Medical Devices Agency device bulletin DB9801 (Supplement 1): Checks and tests for newly-delivered medical devices. (1999)
- The service had access to advanced technical equipment. The service used night vision goggles so the crew could effectively respond to calls, by air, between dusk and dawn when lighting was restricted. The night vision goggles were a technically advanced piece of equipment. Before each use, the crew used a device that enables the goggles to be adjusted to personally suit the wearers own eyes.
- The service used equipment effectively to ensure the safety of patients. Night vision goggles had a battery life of 16 to 20 hours. Service policy was to use the night

vision goggles for a maximum of six hours before replacing the battery. This was to ensure that crews were not at risk of being on a long job with night vision goggles nearing the end of their battery life.

- Storage for equipment was effective and suitable. There were sufficient storage facilities for high security items. The night vision goggles were protected by the International Traffic in Arms Regulations so the service had to secure them safely on the premises. The security arrangements were robust. The night vision goggles were kept in an armoured walled room, placed in the centre of the premises, without any external walls. This room was secure and alarmed. Access to this room was only given to authorised personnel who entered using their swipe key card before having to enter a security code to disable the alarm. The night vision goggles were kept in a locked cabinet that could only be accessed with a code. The corridor that ran alongside this room was monitored with 24hour video surveillance.
- Faulty equipment was efficiently and effectively managed. Staff reported faulty equipment to the operational support team who assigned the appropriate servicing team. When vehicles presented a fault during the vehicle daily inspections, staff would attempt to rectify the fault immediately. For example, if a lightbulb was not working the team would replace it. If there was a fault that could not be immediately rectified, the service held a spare vehicle that was maintained and checked along with all other vehicles. This could be used to avoid any interruption to the service in the event of a faulty vehicle.

Medicines

 The service had a medicines management standard operating procedure and policy. This was in date and had a review date. The policy clearly described the controlled drugs procedure, audit scheduling and the principle for obtaining, administering and recording medicines. The policy also made specific reference to out of date, damaged and recalled stock. The policy reflected national professional guidance, for example, The Audit Commission's report, A Spoonful Of Sugar : Medicines Management in NHS Hospitals (2001) and The Department of Health, Safer Management Of Controlled Drugs: Guidance on Strengthened Governance Arrangements (2007).

- The service ensured that medicines were appropriately and safely ordered. The operational support team checked stock levels on a weekly basis. A local NHS trust supplied medicines under a service level agreement. We reviewed the order form used to order medicines. This was clearly laid out and required the signature of three authorised persons, including the Medical Director.
- The service ensured medicines were only accessible by authorised personnel. Medicines were kept in an alarmed room. This room was only accessible using the authorised person's swipe key card before entering a security code to disable the alarm. This room was accessed from a corridor that was monitored with 24hour video surveillance.
- The service ensured that medicines were secure. Controlled drugs are medicines that can be misused. They therefore need special management and secure storage to prevent any unauthorised access. Controlled drugs were kept in a locked cabinet within the secure medicines room. The keys were kept in a safe, secured by a pin entry system.
- Plasma and kit bags were kept in a separate cupboard that was locked and the fridge containing medicines was locked. These keys were also kept in the safe, secured by a pin entry system.
- The service ensured that medicines were safely stored at appropriate temperatures. Fridge temperatures were checked electronically every minute. Staff used a data card to extract the record of temperatures each day. These records were checked by the operational support staff to ensure the fridge remained within safe limits. The medicines store room temperature was monitored to ensure safe storage of medicines in cupboards. The room was air-conditioned and had a maximum temperature range that was also monitored daily. Records showed fridge and room temperatures had not gone out of range within the reporting period, January 2017 to January 2018.
- The service ensured that medicines in kit bags were appropriately stocked, stored and carried. Medicines in kit bags, in response vehicles, were kept in a locked boot. Drug bags that were not in use were held in a locked cabinet within the alarmed medicines storeroom.

- The service had oversight of drug stability and expiry dates. Pharmacies advise that certain medicines should be stored below a certain temperature. If they are not then this does not make them unusable but does reduce their expiry date. Although fridge medicines stored in kit bags were not stored at the recommended temperature, their expiry dates were correctly labelled according to the stability of the drug when stored out of the fridge. The staff used a list displayed in the medicine storeroom to ensure accuracy of revised expiry dates. This ensured that medicines were being used safely within their true expiry period. We checked 72 medicines and all 72 were within their expiry period.
- The service ensured that medicines were appropriately and safely disposed of. Tablets were disposed of in sharps containers and other medicines were disposed of into pots of de-naturing compound. De-naturing compound is a substance used for the irreversible disposal of medicines. This compound ensures liquid medicines are disposed of and remain unusable. Controlled drugs were disposed of in the presence of a police officer. There was a police drug liaison officer based locally. The service had not disposed of controlled drugs within the reporting period.
- The service used pre-drawn syringes to reduce the room for error when on scene. This meant there was high wastage as drugs that were pre-drawn, and not used, needed to be disposed of within 24 hours. The Executive Director of Service Delivery told us mitigating risk to patients outweighed the financial cost.
- The removal of medicines from stores was correctly recorded in the record books which were locked away in the key safe. Both record books were clearly filled out and the current stock level in the record reflected the actual stock level in the store. We checked three different medicines and found that the quantities were all correct. We also saw that any errors were corrected and signed in line with the service policy.
- The service had a dedicated team to manage the stock levels and rotation of stock. This ensured responsibility was held in one place and reduced room for error. When medicines were administered, the clinician was responsible for recording the amount administered and the amount wasted. The clinician was also responsible for reporting the use of the medicine on their electronic

reporting system. This ensured that stock levels in kit bags were accurately and routinely documented. This meant there was effective and accurate replenishment of medicines.

- The service ensured medical gas cylinders were appropriately stocked, stored and carried. We saw gas cylinders were appropriately stored in a locked cabinet. The cabinet had the appropriate signage and was fixed to the floor. There was clear separation of empty and full cylinders. We checked six cylinders and all were within their use-by dates.
- There was clear guidance on medication use. We reviewed 17 medicine guidance cards. These cards clearly displayed instructions and dosages for the administration of medicines to both adults and children. Medicine cards were accessible remotely using an electronic tablet.
- The service carried out regular medicine audits. The service carried out their own medicine audits every three days. In addition, two trauma pharmacists from an NHS trust hospital carried out a medication security audit every six months. We reviewed the previous three medication security audits which clearly identified areas for improvement and actions were created. Each action had identified a period to complete the changes.
- The service completed actions following the findings from the most recent audit. On inspection, we saw that six of the eight actions identified in the most recent audit had been completed. For example, the fridge was locked when we inspected, the oxygen cupboard was fixed to the floor and small containers of de-naturing compound were kept in the medicine room to dispose of medicines. The outstanding two actions were in progress and on target.
- However, the time between the previous two medication security audits was eleven months. We asked the provider why there had been a five month delay in the last audit. The provider told us they had delayed the audit to accommodate moving base location. This move took longer than anticipated; the service expressed their disappointment with the audit delay and told us this would not be repeated. We reviewed seven service conducted medicine audits during the period of delay. These showed effective medicine management.

Records

- Patient individual care records were accurate, complete, legible and stored securely. Patient records were completed using an electronic system accessible across a range of devices. The record was created with a minimum data set built in. This was the minimum data set from The Royal College of Physicians. This meant the record could not be completed without the minimum data entered. Records were saved securely onto the system and only management and the clinician who completed the report had access to them.
- Patient clinical records were passed to the relevant staff at the receiving hospital by providing a print out of the patient care record.
- Arrangements for recording triage decisions were clear. Transport locations were clearly noted in the patient clinical record. The crew detailed the location and rationale behind decision-making in the free text area of the patient clinical record.
- Records were monitored effectively. The duty manager reviewed every patient record. The duty manager ensured that each record was filled out correctly and acted as a second check to ensure the job was managed in line with policy and guidance.
- Records were effectively used to steer learning. The electronic system automatically flagged jobs that could be used or reviewed at governance days. They were flagged because they had key areas that would benefit reviewing and learning from as a team, for example, all children and all cardiac arrests. Additional to this, the duty manager could flag jobs that were not automatically flagged by the system. Records used for learning at governance days were anonymised to protect patient confidentiality.
- The service kept thorough and accurate records of their patients' continuing care. Staff were encouraged to contact hospitals to follow up the care of their patient. Any follow-up was accurately recorded within the corresponding patient record. We saw records included follow-up data and results, for example X-rays, scans, blood results and coroner reports.

• The record keeping system enabled management to extract trend analysis. This could show what type of jobs staff were undertaking. If managers identified an over exposure to particularly distressing jobs they could offer support to staff.

Assessing and responding to patient risk

- Staff carried out comprehensive risk assessments in line with service policy and national guidance. The service had standard operating procedures for the treatment of specific illness and injuries. This ensured that all staff had a clear process to follow. For example, we saw the standard operating procedure for the management of the pregnant trauma patient. Although standing operating procedures for the treatment of specific illnesses and injuries stated a two-year revision date, staff reviewed them more frequently, as a team, between calls. We saw the team reviewing the major incident standard operating procedure.
- Where the service did not use recognised triage tools, they had extensive research and data to support alternative methods. We asked the service if they used a triage trauma tool. This tool is widely used in pre-hospital care to help crews decide whether a patient should be transported to a major trauma centre or a local hospital. The service did not use such a tool. The service had researched and found that allowing their staff to make a professional judgement was more accurate when triaging patients than the use of a triage trauma tool. We saw the data to support this.
- Risks were managed positively. Two clinicians routinely performed a 'challenge and check' risk assessment. One challenged the other by asking if equipment was prepared or present and the other checked that it was. Staff we spoke with told us this created a safe bubble for the crew to work within as if they were at hospital. This challenge and check created calm and control in the midst of often busy environments and thereby helped reduce the risk of human error. This ensured that everything was in place before performing a procedure or before departing a scene.
- Staff identified and responded appropriately to the changing risks to people who used the services. Vital observations were continuously monitored so the crew could quickly detect the deteriorating patient. The

electronic system created a graph that clearly showed when observations presented deterioration. This monitoring was constant and removed the risk of missing significant observations during intervals.

- Staff used the glasgow coma score (GCS) to detect the deteriorating patient. The GCS is an assessment of consciousness. During the reporting period, January 2017 to January 2018, 33 patients (2%) did not have a GCS recorded. The Executive Director of Service Delivery reviewed all of these records and found all 33 patients had not sustained any injuries or illnesses that affected their consciousness or required the calculation of a GCS. This showed that staff were appropriately monitoring the consciousness and deterioration risk of patients.
- Helicopter Emergency Medical Service (HEMS) staff were well equipped to manage the septic patient. Sepsis is the body's life-threatening response to infection and can progress rapidly to multi-organ failure. Patients with sepsis need to be transferred to hospital for treatment as soon as possible. The crew offered full sepsis treatment in the pre-hospital environment. This meant intervention and treatment took place sooner and reduced risk to the patient. This is in line with NICE guideline 51 Sepsis: recognition, diagnosis and early management which states, 'Ensure ... ambulance services have mechanisms in place to give antibiotics to people with high risk criteria in pre-hospital settings'.
- A proactive approach to anticipating and managing risks to people was embedded and recognised as being the responsibility of all staff. Before high-risk intervention, staff could rapidly sedate and manage the airway of the patient. This meant crews could intervene in a controlled manner.
- The crew had good access to specialist clinical advice when on scene or during transit. Crews had access to a consultant who provided clinical support and advice via telephone. This clinical support was used more frequently when doctors were building up confidence and experience. Staff told us this service was very effective.
- There was a safe and effective escalation process for the deteriorating or seriously ill patient. Additional resources could be requested via the HEMS desk which was located alongside the NHS ambulance trust critical care desk. The critical care desk could call in support

from other services. In most circumstances, HEMS were the most competent team to manage the seriously ill patient in the pre hospital environment. Additional resources were requested if the number of patients was too high for a single HEMS team to manage safely.

- Staff assessed, identified and responded appropriately to challenging patient behaviour in line with the service policy. The HEMS team 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.
- The service had effective procedures in place to manage the disturbed patient. The HEMS crew were able to perform conscious sedation. Conscious sedation enables patients to relax, controls pain and is particularly effective in patients with excited delirium. When conscious sedation was used to manage the disturbed patient, this was made as a best interest decision. A best interest decision is when staff make informed decisions for a patient's best interest when they lack capacity to make decisions for them self. Conscious sedation could be used when crews were going to perform particularly complex or painful procedures, if the patient was assessed as having capacity then consent to be consciously sedated was obtained before-hand.
- There was a strong emphasis on promoting the physical safety of staff. For example, there was an embedded and essential safety process for flight. The HEMS dispatch desk checked on crews, in flight, every fifteen minutes. When a crew were about to land the pilot notified the HEMS desk. The HEMS desk gave them five minutes before confirming they had landed safely. If the HEMS desk did not receive a suitable response, they would immediately dispatch emergency vehicles to the last known location of the aircraft. The service ensured that the safety checks were their first priority. Staff felt safe during flight and told us they were consistently and routinely checked on throughout.

Staffing

- Staffing levels were planned, implemented and reviewed to keep people safe at all times. The service employed six whole-time equivalent dispatchers and fifteen whole-time equivalent HEMS paramedics. The service also employed ten whole-time equivalent HEMS doctors. The service had seven governance leads. Five doctors undertook dual roles as governance leads. The Medical Director and Associate Medical Director were also governance leads.
- Rotas and shift patterns were aligned to demand. Shift times overlapped to ensure resources were available to meet demand. The overlap meant there was not a period where crews were handing over without another crew available to respond to calls.
- Any staff shortages were responded to quickly and adequately. The service had access to a pool of staff to provide support if required. This pool was made up of previous full-time employees of the service. The service ensured these members of staff remained competent and up to date with all mandatory and statutory training including the compulsory attendance at governance days. The service had a pool of 14 HEMS paramedics and 11 HEMS doctors.
- The service was proactive in anticipating and managing doctor recruitment. The service was accredited as a Local Education Provider for national Pre-Hospital Emergency Medicine (PHEM) Doctor training. The 12-month training rotation with the service enables doctors to qualify as Consultants in Pre-Hospital Emergency Medicine.
- The service had a low sickness rate. We reviewed the sickness rates, which showed four shifts of sickness had been recorded in the reporting period, from January 2017 to January 2018. All four of these shifts were covered. The use of dual roles meant that the service had access to competent staff at short notice to cover shifts. Service data showed that shifts were 100% covered during the reporting period.
- Staff skill mix was planned, implemented and reviewed to keep people safe at all times. Rotas were arranged to ensure that a HEMS doctor and a HEMS paramedic were allocated to every shift.
- There were effective handovers and shift changes, to ensure staff could manage risks to people who used

services. Crews handed over the status of equipment, medicine use and vehicle status. If staff had not completed the daily duties during the day shift, these duties were handed over to the night shift crew.

- Staff had adequate time off between shifts. Staff had a minimum of 11 hours rest between shifts. If a shift late resulted in less than an 11 hours rest then management would arrange cover for the beginning of their next shift to ensure they had adequate rest. The service operated on a three days on and three days off rota. This meant staff had adequate rest days between a run of shifts.
- Pilots had adequate breaks during shifts. During inspection, we saw that the service had provided a room for pilots to sleep. This was in line with CAA flight time limitations, CAP 371, Avoidance of Fatigue in Air Crews that specifies the limits on the length of time pilots can fly. Pilots had access to the room where they could have undisturbed sleep for a specific amount of time.
- Staff had adequate breaks during shifts. Staff were able to take their rest breaks as and when they had free time between jobs. If staff experienced a busy shift, they were encouraged to notify the duty manager so the manager could stand them down for adequate rest.
- Staff had adequate rest after shifts. The service provided rest rooms with camp beds, for staff, so they could rest before travelling home after a shift. These rooms were in their early stages; plans were in place to make them more comfortable so staff would be more encouraged to use them.

Anticipated resource and capacity risks

- The service worked with local hospitals to ensure they had suitable capacity. Staff were able to telephone ahead to the receiving hospital to check capacity levels. This ensured that patients were being triaged to hospitals that had the capacity to manage their injury or illness.
- Risks to safety from service developments, anticipated changes in demand and disruption were assessed, planned for and managed effectively. During our inspection, we reviewed the morning briefing. This briefing took place every morning and informed staff of foreseeable risks for that day. For example, the pilot reviewed the weather forecast for the day and discussed the suitability and safety of flight to the crews.

- Risks to safety at night were assessed, planned for and managed effectively. When a job came in at night, the pilot and co-pilot entered the pilot planning room so they could safely assess the route and safe landing during reduced lighting. The door to this room was closed to avoid any distraction from the rest of the crew.
- In the event that it was not deemed safe to fly, the service had response cars available. The HEMS crew would respond by car to attend the patient and travel with the local NHS trust ambulance to the receiving hospital.

Response to major incidents

- The service had effective arrangements in place to respond to major incidents. The service had a current major incident standard operating procedure and policy. The policy clearly described staff responsibilities and the varying levels of incidents, these were, major incidents, mass casualty and catastrophic incidents. The policy detailed the three phases of major incident management; preparation, response and recovery. It also reflected national professional guidance, for example, the NHS England document Concept of Operations for managing Mass Casualties (2017) and the Civil Contingences Act (2004).
- Crews understood their responsibilities in major incidents and staff could tell us essential actions. For example, staff told us the importance of a windscreen review which is an initial assessment of the scene passed to the control desk. This enabled the commissioning NHS trust's emergency operations centre to task the appropriate type and number of resources to the job. A windscreen review was handed over before the crew became too involved in the scene to be able to give a good overview. Without a windscreen review the emergency operations centre may not have been able to dispatch the most effective support and resource.
- HEMS crews understood their role on scene was to provide leadership and have oversight of the incident until the local NHS ambulance trust assumed command. Staff we spoke with told us the importance of being clearly identifiable so that other staff members

knew who to go to for support. Staff also told us the importance of delegating tasks to the available resources rather than becoming too engrossed in clinical care or treatment.

- Staff placed high priority on being able to have oversight of the incident. For example, one staff member gave an example of a patient who had wandered from the scene of the accident with significant injuries. This patient was noticed because the staff member was able to take a step back and observe the scene.
- During our inspection, we saw staff review their major incident standard operating procedure. The group began by talking about their experiences of major incidents, how they managed them and what challenges they faced. The group then discussed how they might better overcome those challenges if they arose again. This showed that staff were learning together, sharing their experiences and jointly improving the standard operating procedure.
- Crews had effective oversight of incidents that did not qualify as major. The staff called these 'complex incidents'. For example, a road traffic accident that injured several people would not be deemed a major incident but would be challenging for the responding crew. Staff discussed their management of complex incidents and participated in regular scenario-based training to replicate such an incident. We heard staff discuss their management of these incidents and offer tips and guidance to the rest of the team.
- Crews were involved in planning and rehearsals of major incidents. The service conducted a major incident training scenario every six months. The service tested major incident plans with other agencies. A member of staff took part in a channel tunnel major incident training day. This included emergency services from France and gave Kent, Surrey and Sussex Air Ambulance Trust an opportunity to learn from a large scale event.
- A major incident pack was held on the aircraft and vehicles. These packs included triaging tools, for example, immediate action cards and triaging labels. This enabled staff to triage patients according to the severity of their injuries.
- The service had specific arrangements to deal with infection and contamination. Particularly for chemical, biological, radiological and nuclear (CBRN) incidents.

The service had direct links with the NHS ambulance trust that could dispatch the hazardous area response team (HART). In the event that a CBRN incident was notified, HEMS crews would not attend until HART had been on scene and deemed it safe to do so.

• The service had a current effective and comprehensive business continuity policy. The policy clearly described the varying levels of incidents and the importance of reporting all of them. The policy detailed an activation and escalation flow chart and contact numbers for all key members of staff including the building owner and site security. The policy reflected national professional guidance, for example, the NHS England Serious investigation framework.

Are emergency and urgent care services effective?

Evidence-based care and treatment

- People's care and treatment was planned and delivered in line with current evidence-based guidance, standards, best practice and legislation. Standard operating procedures reflected up to date and relevant legislation and guidance set out by relevant national public bodies and committees, for example, The National Institute for Health and Care Excellence (NICE) and NHS England. We also saw reference to guidance from other air ambulances and international sources for example Queensland clinical guidelines.
- Crews worked to service guidelines. The service provided various standard operating procedures for differing treatments and procedures. We reviewed 14 standard operating procedures. All of these were up to date and had set review dates.
- The service ensured that standard operating procedure reviews took place on time. The electronic system alerted management three months in advance of the review date and then every Monday until the due date. This ensured that reviews did not become delayed and all standard operating procedures remained up to date and relevant.
- The service was assured that new staff had read and understood policies and procedures. On induction, the service sent out all standard operating procedures and policies to new staff. The service arranged a test on all

key clinical standard operating procedures. This test was completed by new staff at the beginning and at the end of the induction period. This was to measure the improvement in knowledge following induction training, and reflected the effectiveness of induction. Staff were also orally tested on standard operating procedures before they could practice autonomously.

- The service was assured that staff had read and understood updates and changes to policies and procedures. If there were any updates or changes to standard operating procedures or policies then this was sent to all staff through the electronic system. Staff acknowledged receipt, electronically, to show they had received and read the changes.
- Staff who were working remotely had access to guidelines and protocols on a tablet device. This had internet access to the service drives that held all standard operating procedures and service policies.
- Standard operating procedures were discussed daily in teams. During our inspection, we saw the team group together to discuss a standard operating procedure. This meant procedures were reviewed and aligned with real life scenarios and the practicalities of a job.
- Care was regularly monitored to ensure it was in line with evidence based, guidance, standards and best practice. This was monitored through document reviews and supervision. Duty managers reviewed all patient clinical records and completed supervisory attendance on jobs to ensure that care was being performed in line with guidance and legislation.
- The service conducted research to ensure they were using the most effective equipment for patients. For example, the service researched the varying ways to keep patients warm. This was because, following a traumatic injury, patients lose body heat rapidly. The service found the most effective material to contain body heat was bubble wrap. This was effective as it ensured patients remained insulated and its transparency enabled the crew to see injuries without exposing patient skin. The equipment stores held quantities of bubble wrap on large rolling dispensers for easy access.

Assessment and planning of care

- People had comprehensive assessments of their needs, which included consideration of clinical needs, mental health, physical health and wellbeing. The service identified expected outcomes and ensured patients were transported to the most appropriate treatment centre.
- Due to the type of jobs attended, the choice of hospital was dependant on the clinical condition of the patient. This ensured the receiving hospital had appropriate facilities and teams to manage the patient effectively. For example, patients were transported to stroke units if they had suffered a stroke, catheterisation laboratory for cardiac concerns and major trauma centres for severe injuries relating to major trauma.
- The HEMS team were able to discharge patients on scene. However, the HEMS team rarely attended calls that resulted in a patient not being conveyed to hospital.
- All staff we spoke with were familiar with the rights of people subject to the Mental Health Act and had regard for the Mental Health Act Code of Practice.
- Discrimination when making care and treatment decisions was avoided. Crews often performed time-critical care and treatment. Staff we spoke with were adamant that they applied the same level of care and treatment to all patients regardless of their characteristics or cultural background.
- The service had access to a variety of equipment to enhance the delivery of effective care. For example, all crews carried a mechanical chest compression device. This was a portable device used to deliver consistent uninterrupted chest compressions. This device enabled a clinician to be available to address and manage other essential medical concerns.
- Due to the seriousness of patient injuries, severity of their illnesses and the short journey times, patient hydration and nutritional needs were not a prioritised assessment.
- Staff effectively monitored and managed pain. Staff did not use a numerical pain scale. The majority of patients were critically ill or seriously injured and often in severe pain.
- Staff assessed 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. One patient we spoke to, who had suffered significant injury, told us they "couldn't remember feeling any pain" when being treated by the HEMS crew.

• When people experienced physical pain, staff responded in a compassionate, timely and appropriate way. For example, a patient told us, "I don't remember feeling any pain; they gave me pain relief that was really strong". This patient had suffered severe injuries and fractures, their recollection of not feeling any pain demonstrated the timely and appropriate way crews responded to their pain. Although a small cohort of patients (13), the most recent patient survey showed that 100% of patients, who remembered their treatment, said the crew gave them sufficient medication to control their pain.

Response times and patient outcomes

- Information about people's care and treatment, and their outcomes, was routinely collected and monitored. This information was used to improve care. Staff were encouraged to follow their patients for 72 hours after handing over to the receiving hospital. The service used this follow up data to assess the effectiveness of care given on scene and how that care influenced patient outcomes.
- We saw follow up data was collected and accurately recorded in patient clinical records. Data showed that staff followed 79% of patients for a minimum of 72 hours. The service was looking into recruiting a patient liaison nurse to develop the follow up procedure further.
- Trends in follow-up information were used to improve patient outcomes. For example, follow up information showed that patients had abdominal injuries that the HEMS crew had not always identified at the scene.
 Analysing trends of abdomen injuries enabled the team to recognise which incidents would most benefit from an ultrasound. This also helped guide training scenarios so the team were able to recognise the incidents that required further abdominal assessments.
- Outcomes for people who used services were positive and consistent. Data showed that the intended

outcomes for patients was being achieved. HEMS crews attended patients with life threatening illnesses and injuries. The strategic objectives were to ensure patients had an appropriate response, taken to the most appropriate hospital and the services provided should be as safe and effective as possible. Measuring the outcome of patients was challenging and so the service joined a local university to research how to best measure patient outcomes.

- The average probability of the survival Kent, Surrey and Sussex Air Ambulance Trust patients in 2017 was 85.1%; their actual survival was 86.2%. This evidenced that crews were providing effective care and treatment because slightly more patients survived than predicted.
- The service had strong links with other providers and bodies who monitored and compared patient outcome data. The service engaged with the Trauma Audit and Research Network and had information sharing agreements with the major trauma centres to monitor patient outcomes.
- Response, on scene and turnaround times were effectively monitored. 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. Nevertheless, we reviewed the data, which showed that teams arrived on scene in an average of 18 minutes and had an average on scene time of 27 minutes.
- The service put a system in place that improved their on scene times. The service had recently implemented a radio reminder of passing time to HEMS teams. The dispatch desk alerted the crew every five minutes that they were on scene. This was not used to pressure teams but to make them aware of passing time. This was the result of research conducted by the Executive Director of Service Delivery on a clinician's perception of passing time. The implementation of the five minute reminders showed a significant reduction in on scene times of up to six minutes.

- Support to staff was based on a thorough analysis and investigation of things that went wrong as well as things that went right. Kent, Surrey and Sussex Air Ambulance Trust were users of an encrypted video badge device. This was a video camera that staff could fix a name badge to. The device was very small and unobtrusive to patients and staff. This was used during supervision and reviewed with the relevant staff to evaluate team working, leadership and non-technical skills.
- Wherever possible, staff gained consent for its use. In some cases, patients would not be able to consent to recordings, therefore, the footage was heavily encrypted, automatically destroyed after six months and only the staff who were involved in the care and treatment could review the footage.
- Footage obtained on the encrypted video badge device was used to give staff an opportunity to review the scene and discuss with their clinical lead any areas they could have improved. This was done on a one to one basis. Staff told us that the perception of what happened was very different to what did happen in the video and so found reviewing the footage helpful. This enabled staff to identify areas for improvement as well as areas of good practice. Any findings or learning from these reviews were shared in scenarios at governance days, so that all staff could have an input and learn.
- Staff performance was identified and staff were supported to improve. Each member of staff had been assigned a consultant educational supervisor who helped develop their personal development plan and training needs. The service was dedicated to tailoring programmes to individual's needs and aspirations.
- Staff had the right qualifications, skills, knowledge and experience to do their job when they started their employment and on a continual basis. The human resources department required suitable references. These were held in electronic staff files by HR. Staff selection took place through a number of assessments. This meant that staff were selected based on an assessment of different areas of competence, skill and experience required for the role.
- The service ensured that staff had the required disclosure and barring (DBS) checks. DBS checks were

Competent staff

processed by the human resources department before staff started induction. These checks were completed every three years and held in their electronic staff file. All staff files had up to date and suitable (DBS) checks.

- Staff also undertook a variety of tests, both mental and physical, before being placed on the induction programme. The induction programme consisted of thorough and continuous training over the course of six to eight weeks supervision. Staff were tested on a variety of areas before they could complete their induction period.
- Staff were suitably assessed to carry out manual handling activities. The recruitment process included a fitness test. This test included the lifting of heavy weights both across long distances and up and down steps. This was designed to replicate the different environments crews encounter when lifting heavy patients and equipment. This enabled the service to recruit members of staff who were physically able to perform manual handling activities associated with the job role.
- Driving licenses were checked before induction. These checks were recorded on the individual electronic staff record and repeated annually. Staff also had a duty to report any reason that may disqualify them from driving trust vehicles.
- The learning needs of staff were identified and training was put in place to meet them. Staff were encouraged to speak openly about any learning needs. Staff told us they could suggest learning areas for upcoming governance days and felt able to do this. Staff clearly felt passionate about the level of care and treatment they provided and told us they were committed to addressing any learning needs as soon as possible.
- All staff attended a governance day every two weeks. This was mandatory and was included as part of the staff rota. This day included journal clubs, consultant-led peer reviews, skills sessions, training scenarios, simulation and topic teaching. Staff received certificates for attendance which contributed to their continued professional development.
- The continuing development of staff skills, competence and knowledge was recognised as being integral to ensuring high quality care. Staff had appropriate training to meet their learning needs. Staff had access to

£1,000, each, to fund any training they had interest in. Staff were also encouraged to request further funding if they were interested in training at a cost beyond £1,000. Staff told us the service was open to support and fund training requirements.

- Staff were encouraged and given opportunities to develop and enhance their professional skills and experience. For example, paramedics were funded to study for their Master of Science degree. At the time of our inspection, four members of staff had achieved their Master of Science degree. One staff member was awarded a national prize for the best research project. This awarded researchers for their outstanding achievements making a significant contribution to their field.
- At the time of our inspection, the service was supporting a paramedic to start their PhD on patient outcomes. A PhD This paramedic and the subject matter they chose for their PhD, demonstrated their commitment to improving patient outcomes.
- Staff were proactively supported to acquire new skills and share best practice. Staff were supported to present their research. Over 30 members of staff presented research posters at conferences across Europe. For example, the service funded 10 members of staff to travel to Rome and present their research posters at a world conference. A member of staff was awarded Best Research Poster Prize at this conference.
- Staff were supported to deliver effective care and treatment through meaningful and timely supervision and appraisal. Appraisals were carried out yearly. As part of a routine request for data, before our inspection, the provider told us they had completed 77% of staff appraisals. This was made up of 100% appraisals for paramedics, governance leads and dispatchers, but we saw low rates for the pool of temporary staff; paramedics (56%) and doctors (67%). Two weeks following our inspection, appraisal rates had improved to 86%. The service target was 100%.
- We asked the provider why some appraisals rates were worse than target. The service told us that all appraisals were completed using a cascading cycle. This meant the Chief Executive officer was appraised first, followed by senior leadership, managers and so on. This was to ensure that everyone who received an appraisal had

clear objectives enabling staff to work toward the common strategic goal. This meant delays to some members of staff had a knock on effect to others. The service also told us that they found appraising their pool of temporary staff challenging because they worked on an ad-hoc basis.

- The service was investing in a new system to improve the management of their appraisal system. They were in the process of changing the way the governance leads worked. The service was moving toward governance lead presence seven days a week so that appraisals were more easily completed.
- The service had arrangements for supporting and managing staff. This included one-to-one meetings, clinical supervision and appraisals. For example, staff competence in delivering patient care was assessed through direct consultant supervision of their practice.

Coordination with other providers

- When people received care from a range of different staff, teams or services, this was coordinated. There were agreed care pathways with other providers to ensure patients were treated in a way to achieve the best outcome and the service worked with local hospitals to improve care pathways.
- The service's electronic system was able to provide data that showed how many trauma patients they had attended. The service provided this information to trauma contacts, at the receiving hospitals, every month. Providing hospitals with this data gave them the evidence and support to provide extra services and develop new care pathways.
- There were clear lines of responsibility and accountability between HEMS staff and the local NHS ambulance trust staff. A number of the policies we reviewed had referenced coordination with the local trust. For example, the major incident standard operating procedure clearly detailed the way HEMS staff and the NHS ambulance trust would work together in the event of a major incident. This ensured open lines of communication between teams so that both the scene and patients could be managed effectively.
- There were arrangements in place to escalate issues with the local NHS ambulance trust. The Executive Director of Service Delivery told us they had good links

with leadership at varying levels within the NHS ambulance trust organisation. This meant that any concerns could be addressed at the appropriate level. The Executive Director of Service Delivery had regular meetings with the NHS ambulance trust, for example the quality assurance group meetings. This gave Kent, Surrey and Sussex Air Ambulance Trust a variety of platforms to raise concerns. The service also encouraged any concerns to be raised in reverse.

- The service had raised issues with the local NHS ambulance trust. The Associate Medical Director told us they consulted the local NHS ambulance trust, significantly, over the use of the video badge system. They coordinated with a committee to get approval to use the video badge system while ambulance road crews were present. This approval demonstrated a positive working relationship between the two providers.
- The service was recognised for providing good team work and partnering with other providers. The service was awarded 'team of the year' by the local NHS ambulance trust. They were also awarded 'partner of the year' by the local fire and rescue emergency services.
- The service had good links with other air ambulance trusts. Kent, Surrey and Sussex Air Ambulance Trust's Medical Director was also a governance lead for another air ambulance. This enabled them to routinely share and cross-reference good practice. Also a member of the team travelled to Sydney, Australia to research the protocols and systems used there to improve the secondary transport service in the UK.
- The service regularly coordinated with local hospitals and other organisations. As part of the service's commitment to the follow up of patients, they had made good lines of communication with relevant teams. Staff were able to communicate to get copies of scans and other key data results. For example, the service was able to obtain blood gases of their previous patients to see how efficient their own equipment had been. The service also coordinated well with coroners in the local area and actively sought coroner reports to enhance their learning. The service had also strengthened links with coroner's officers in the region so they could signpost families or relatives to Kent, Surrey and Sussex Air Ambulance Trust if they had any questions to ask.

- Procedures were in place for joint investigation and learning with other providers. Where complaints involved other providers the Executive Director of Service Delivery would communicate and work with them in line with The Local Authority Social Services and National Health Service Complaints (England) Regulations 2009.
- The service coordinated training events with a variety of other providers to enhance lines of communication. Staff took part in training scenarios with the police and fire service so they could have experience of effectively working as a team during a large-scale incident.

Multi-disciplinary working

- Handovers to hospital staff were effective. Crews handed over patients using a standard set of prompts; this meant staff handed over using a consistent approach. Staff were effectively trained to project their handovers to ensure that everyone concerned was focused and clear about the detail of the patient condition and management.
- Staff worked collaboratively to understand and meet the range and complexity of people's needs. All necessary staff, including those in different teams and services were involved in delivering care and treatment. Staff we spoke with told us that when they arrived on scene, they made a note of their resources and skill levels then delegated everyone a role to suit. The team were encouraged to include all members of staff on scene, this ensured that the HEMS staff had good oversight of the scene and used the variety of skill levels to the patient's advantage. Staff recognised this varied from person to person but placed high importance on recognising these difference as well as managing the patient.
- Staff worked together and agreed plans to transport the patient. Before transporting the patient, the staff communicated with the other teams to discuss the best method of extraction. The HEMS crew assigned roles and tasked clinicians to retrieve appropriate equipment. Staff communicated where the patient would be transported to, the method of transport and then confirmed that all involved were happy with that decision.
- 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 at the appropriate times. A member of staff told us it was important they recognised staff emotions as well as skill level. For example, before assigning tasks, staff not only assessed a clinician's skill level but also their body language and facial expressions. This helped them assess the suitability of assigning tasks according to both skill and their level of stress. This ensured staff were confident and competent in the tasks they were set.

- Staff recognised it was important to work as part of a team and not to take over if it was not necessary. Staff told us that it was equally important to recognise when a road crew was in control and managing the scene and patient effectively. Staff acknowledged that arriving on scene and taking over when the situation was already being well managed was not effective team working. In these situations they left management with the clinician and offered support and guidance where required.
- Staff included recognising the needs of road crews as part of their governance days and scenario training. For example, staff told us they used the video camera footage to analyse the reaction from ground crew so they could better understand and recognise the needs of the staff around them.
- Due to the severity of illnesses and injuries, when attending calls, the HEMS crew rarely referred patients on. If required, HEMS crew had access to the local NHS ambulance trust's referral system.
- The service was a member of the Air Ambulance Association. This gave the service an opportunity to share best practice and guidance with other similar services. For example, Kent, Surrey and Sussex Air Ambulance Trust were invited to present at the last Air Ambulance Association national conference.

Access to information

• All relevant information needed to deliver effective care and treatment was available in a timely way. Crews were effectively made aware of special notes to notify them of any advance information known about the patient. The NHS ambulance trust held details of patient care plans.

The system alerted the crew that a care plan was in place and the crew could contact the emergency operations centre to retrieve detailed information in relation to that care plan.

- The service had access to a variety of information and data to follow up a patient's progress in the 72 hours that followed handover.
- The service had up to date satellite navigation systems on their electronic tablets for use in response cars. These were updated automatically and so always displayed current and up to date mapping. Navigation systems, within aircrafts, were maintained in line with the requirements and legislation set out by the civil aviation authority.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- Staff understood the relevant consent and decision making requirements of legislation and guidance. Staff had access to the consent and capacity standard operating procedure. 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 Joint Royal Colleges Ambulance Liaison Committee's Consent Guideline Alert (2009).
- 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. Staff could describe examples of obtaining consent. For example, when treating a child, staff told us that, where appropriate, they obtained consent from the parent. All staff we spoke with were familiar with and could assess a child under the age of 16 for Gillick competence. Gillick competence is used to determine that children under 16 can consent if they have sufficient understanding and intelligence to fully understand what is involved in a proposed treatment. This includes its purpose, nature, likely effects and risks, chances of success and the

availability of other options. 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.

- Staff also gave us an example of implied consent, where a patient held their arm out to be assessed. Staff told us the importance of clearly documenting consent, and all the efforts made to gain that consent. Patient clinical records clearly showed if patients had given consent along with a section to document further detail.
- People were supported to make decisions. When patients were conscious, staff discussed their treatment options with them. Staff told us they clearly explained both the positives and negatives of any treatment or action. This enabled patients to make informed decisions. Where patients preferred alternative methods of care or treatment, staff respected this.
- A person's mental capacity to consent to care or treatment was assessed where required. Staff told us they made best interest decisions for patients who lacked mental capacity and were unable to understand or retain information relevant to the consent required. If staff made a best interest decision they documented the reason for the disturbance in mental functioning, for example, serious injury, learning disability or substance abuse. Staff also recognised that mental capacity could fluctuate over time due to extreme pain or fatigue.
- When patients lacked the mental capacity to make a decision, staff made best interest decisions in accordance with legislation. Staff supported each other by discussing the best interest of the patient together. Staff we spoke with told us they took the patient's wishes, beliefs and values into account when making a best interest decision and put the patient at the centre of their decision making process. If family were present, staff told us they involved them as much as possible.
- Staff understood the difference between lawful and unlawful restraint practices. Staff knew it was illegal for staff to restrain patients against their will. Staff told us they would provide limited restraint, for a short period only, to prevent harm to the patient.
- The use of restraint of people who lack capacity was clearly monitored for its necessity and proportionality and action was taken to minimise its use. The standard operating procedure clearly stated that if anything more

than minimal physical restraint or encouragement was required, then the police were to be requested. This reflected professional guidance, for example, The Royal College of Nursing document, Let's Talk about Restraint: Rights, risks and responsibilities (2008).

- The service had effective oversight of consent. For example, the use of the video badge system was thoroughly reviewed and discussed at board level.
- Staff completed comprehensive training in consent. We reviewed the learning outcomes for this training. This included knowing when consent was needed, providing information so patients could make informed decisions, understanding why a patient may refuse treatment and the legal requirements around consent and capacity. At the time of our inspection, 100% of staff had completed this training. Refresher training took place annually.
- The service did not regularly attend patients who had been detained by the police. If a patient was being transported, who had been detained by the police, a police officer would remain present and the HEMS crew would be responsible for the patient's treatment, condition and safety.
- The service had a comprehensive do not attempt resuscitation standard operating procedure. This was in date and had a review date. The policy reflected national professional guidance, for example, the Mental Capacity Act 2005.
- The consent policy clearly detailed the process to be taken in the event of an advance decision to refuse treatment or a do not attempt cardio-pulmonary resuscitation (DNACPR) order. Staff understood their responsibility to comply to advance decisions. Policy stated staff would not withhold lifesaving treatment if there was not clear evidence the order existed and was relevant.

Are emergency and urgent care services caring?

Compassionate care

• There was a strong, visible person-centred culture. Staff we spoke with were highly motivated and inspired to offer care that was kind and promoted people's dignity. Staff ensured, as far as possible, that dignity was maintained during treatment and care, in public places. A member of staff gave us an example of requesting the police to set up barriers to keep the public at a reasonable distance and strategically positioned vehicles to block onlookers. The most recent patient survey showed that 100% of patients who remembered their treatment felt the HEMS crew preserved their privacy and dignity.

- Staff ensured, as far as possible, that dignity was maintained during transport in and to the vehicle. A consultant gave us an example of requesting officers from the fire service to hold up tarpaulin to shield the patient from public view as they were moving the patient to the aircraft. The teams also used bubble wrap and blankets to cover the patients and only uncovered patients if it was necessary.
- Staff showed an encouraging, sensitive and supportive attitude to people who used the services. We spoke with a patient who told us, "I vividly remember the people in red suits looked after me, held my hand and kept reassuring me that I was going to be ok and so I knew I would be".
- Staff took the time to interact with people who used the service in a respectful and considerate manner. Patients were able to come back to the base at a time to suit them to aid their recollection and recovery. As part of a routine request for data, prior to inspection, the provider gave us their patient feedback. We reviewed 28 comments and feedback forms. Many of these patients commented on how beneficial it was to return to the base and speak with the team who cared for and treated them.
- Feedback from people, who used the service, was continually positive and showed staff had demonstrated encouraging supportive and compassionate care. For example, 'You were so kind, professional, reassuring and clinically excellent, thank you so much'.
- Staff managed the deteriorating patient effectively in the presence of a relative or carer. Staff told us that it was important to anticipate potential deterioration and advise relatives or carers beforehand so they could be prepared. Staff told us that in the event relatives or carers were not pre-warned, then they would explain what they were doing as much as possible so they felt involved and knew what was happening.

Understanding and involvement of patients and those close to them

- Staff communicated with patients so that they understood their care, treatment and condition. A patient we spoke with told us, 'I remember them telling me we were in a helicopter and explaining what had happened'. Staff told us they tried to keep patients as informed as possible by explaining procedures and treatment in a clear way that patients could understand.
- Staff recognised when patients and those close to them needed additional support to help them understand and be involved in their care. Wherever possible staff would communicate with the patient to establish what that extra support was and how the patient would like that support to be given. The most recent patient survey showed that 100% of patients who remembered their treatment said the crew talked to them in a way that was easy to understand.
- Staff made sure that patients and their relatives were able to find further information or ask questions about their care or treatment. HEMS crew worked in often fast-paced, time critical environments. While they tried to keep patients and relatives as informed as possible during treatment, they recognised that patients and relatives may have had further questions they wanted to ask.
- The service had provided staff with a patient calling card. This was a small card that said, 'You were seen by our doctor/paramedic team. You or your family may have unanswered questions about what happened. If you would like to speak to someone please contact our patient support'. The service contact details followed. Staff left this card with patients and relatives after handing them over at the receiving hospital.
- Patients who used services and those close to them were involved in planning and making decisions wherever possible. Staff explained procedures and treatment clearly. They included the positives and negatives and explained the possible outcomes to enable patients to make informed decisions. The most recent patient survey showed that 100% of patients who remembered their treatment felt involved in choices about their treatment of care.
- Staff were fully committed to working in partnership with people and making that a reality for each person.

Staff included patient's families by explaining procedures and consulted them when making best interest decisions. Family were often tasked with roles so that they were involved in managing their loved ones care. For example, family members were tasked with holding their loved ones hand and keeping them calm.

- Staff understood the needs of parents and their children. When treating a child, staff told us they involved the parents as much as possible and considered their needs as well. A staff member told us they purposefully explained, to both the parent and the child, what was happening so that they both felt safe and in the situation together.
- Staff told us that where possible they would accommodate a relative to travel with the patient. Staff understood that family members would be worried and prefer to be with their unwell relative. Staff also acknowledged that a relative's presence was calming and reassuring for the patient. This showed that staff had compassion for their patients and considered what would make them feel most safe and reassured.
- The service held records of all patients and relatives that contacted them. The service had been contacted by 31 patients to express their thanks or donate to the charity. This showed that leaving the patient call card was effective in enabling patients and their family to make contact with the service.
- The service was committed to obtaining feedback from their patients so they could better understand them. The service developed a patient information leaflet and business card that sign posted patients and their relatives to provide feedback. The service had also developed a patient feedback survey but response numbers were low, so they completed a research project in collaboration with a local university. This project evaluated the experience of their patients.
- Kent, Surrey and Sussex Air Ambulance Trust used feedback from the survey to change the way they interacted, cared for and treated patients. For example, feedback showed that patients remembered feeling very cold. The service procured and used a warming mat to actively warm the patient and then wrapped them in bubble wrap to contain the heat.

- The service placed high importance on reassuring the patient. Staff talked to patients and held their hand, as research showed that for those patients who remembered, this interaction was a significant memory they held from the incident.
- All staff we spoke with had a passion and commitment to understand their patient's experiences. Patients were often unconscious or sedated throughout treatment and so staff valued the contact they received from patients as valuable learning about how they could better understand their patients.
- The service valued their patients' experiences. The service created videos titled 'A Life-Saving Story'. These videos looked into the experience of patients and the impact the air ambulance had on their lives. We reviewed two of these videos. Both videos were emotionally insightful and reflected the thoughts, feelings and experience of their patients.
- The service welcomed patients and their relatives to volunteer to raise money for the charity. Patients found this experience highly rewarding. A patient we spoke with told us that engaging in fundraising events was inspiring and made patients feel as though they were giving back. This supported and empowered patients to manage their emotional strength and mental health following often distressing and traumatic events.

Emotional support

- Family and relatives were supported during distressing events. Staff we spoke with described managing the anxious and distressed parent of child patients. Staff told us that if the parent was not already on scene, it was important to be aware of when they arrived so they could intercept them and prepare them for what they were about to see. Staff did this by being open and honest about the injury or illness of the child and letting the parent know what the plan was. This enabled parents to cope better emotionally with the incident and reduced the likely hood of a parent intercepting at a crucial moment of care. Although a small cohort of patients (13), the most recent patient survey showed that 100% of patients, who could remember, said the HEMS staff kept their family and friends informed and staff told them which hospital they were going to.
- Parents visited the service to express their thanks. Five sets of parents of children who were cared for and

treated by the HEMS crew, visited Kent, Surrey and Sussex Air Ambulance Trust. This showed that parents felt supported and able to make contact following the incident.

- Patients were given appropriate and timely support and information to cope emotionally with their care, treatment or condition. Fourteen patients had returned to visit the service with further visits scheduled after our inspection. We spoke with a patient who had visited the service. This patient told us they met the doctor who had treated them. The patient was extremely grateful for the support provided during their visit. The patient told us, "The doctor had reviewed my case in advance and was well prepared to talk to me in detail about the treatment and care that had been given to me".
- Crews ensured that patients and those close to them were supported during distressing events. Staff told us they viewed patient's relatives and loved ones as their patients too and ensured they were cared for and supported.
- Staff supported relatives of patients who died before or during their care. Eight relatives of patients, who had not survived, visited the service. Staff told us they consoled relatives as much as they could and answered any questions relatives had to the best of their knowledge.
- Staff provided emotional support to patients who were self-harming, distressed or vulnerable. Service policy stated that staff were to ensure they recognised these vulnerable patients and respected them. Staff told us these patients required a high level of emotional engagement and found that listening to these patients and taking time to interact with them in a sensitive and supportive manner helped build trust. Staff told us that if they had any concerns for the patient's well-being they would take steps to protect the patient as best they could.

Supporting people to manage their own health

• The service signposted patients to appropriate services who could provide support for people to manage their own health. HEMS crew responded to patients with critical illnesses and injuries. Often, surviving patients

were living with conditions that were life changing. When patients contacted the patient support team, they were signposted to specialist services and support networks that could provide advice and support.

• The service provided a welcoming and warm environment for patients to volunteer. A volunteer, we spoke with, told us, "Every part of the organisation is set up to be really caring and make you feel valued".

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

Service planning and delivery to meet the needs of local people

- The service has increased its fleet of aircraft to three through the procurement of two new state of the art aircraft. These aircraft have larger cabins and have greater operational capability which enables the service to explore the provision of more complex treatment in flight, instrument flying and increased availability of aircraft at night.
- The service worked with other providers to support them to meet demand. The HEMS dispatch desk sat alongside the local NHS ambulance trust critical care desk. In the event of a critical incident, the two teams collaborated to ensure they dispatched resources to support each other and meet the needs of local people.
- The service planned and delivered care with the local NHS ambulance trust. Staff told us they worked in collaboration with road crews from the NHS ambulance trust to care for and treat patients. When transporting patients by air was not an option, road crews transported patients in ambulance vehicles while HEMS staff travelled in the ambulance to continue patient care. The staff we spoke with were dedicated and proud of their collaborative delivery of care with local NHS ambulance trust crews.
- The services provided and reflected the needs of the population served. The service regularly monitored any trends in calls assigned to HEMS. This enabled them to analyse when demand was at its peak. Recent review of demand prompted a change to the rotas. The service found that between 7pm and midnight, there was a demand of patients the service was unable to attend. The service rota had two lines of 12 hour shifts. They

replaced one line with two nine hour shifts. This meant that handovers did not take place without another crew being available for deployment. These extra six hours were increased in the absence of funding. The board felt that mitigating the risk to patients outweighed the financial cost so this extended rota was adopted despite the additional cost.

- The service worked with providers to review the quality of care provided, ensure patient's needs were met and identify areas for improvement. The service maintained regular communication with the local NHS ambulance trust and planned the delivery of services together. The Executive Director of Service Delivery attended monthly meetings with the Medical Director of the NHS ambulance trust.
- Kent, Surrey and Sussex Air Ambulance Trust offered an 'in reach' service. This service was created to give patients quick access to trauma specialists in hospitals that were not major trauma centres. The HEMS team would dispatch to a hospital to treat a patient in the accident and emergency department and then transport them to a major trauma centre. This service supported the hospitals that did not have access to major trauma teams.

Meeting people's individual needs

- Services were planned to take account of the differing needs of patients. We reviewed the service equality policy. This policy was within the crew handbook, which was in date and reviewed annually.
- Staff were competent and understood the importance of taking into account the differing needs of patients. The service provided equality and diversity training as mandatory. The training focused on staff understanding the importance of equality and inclusion. At the time of our inspection, 100% of staff had completed this training.
- Staff told us it was important for them to know the patients usual cognitive and physical state so they could assess them effectively. Staff stressed 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, patients who were hard of hearing, partially sighted and patients living with dementia.

- There was a proactive approach to understanding the needs of different groups of people and to deliver care in a way that met these needs and promoted equality. The service met with a representative of those who would not accept blood transfusions due to their religious beliefs. Staff received training on how to consider patients' wishes and how to manage the situation with understanding and compassion.
- Translation support was available for staff in the treatment of patients who could not speak English. Staff had access to a language translation telephone support team who provided language interpretation for healthcare in over 200 languages. The number was stored on all operational phones for easy access. The service recognised that translating with a loved one who was in severe pain was distressing. Service policy detailed staff were to avoid adding additional strain on relatives and carers wherever possible.
- 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.
- Wheelchair users had access to services on an equal basis to others. Due to the severity of illnesses and injuries attended, staff carried most patients to the aircraft. In the event that the HEMS crew travelled with the local NHS ambulance trust road crew, these vehicles were adapted so patients could enter them in a wheelchair via a ramp.
- Staff engaged with people who were in vulnerable circumstance. The safeguarding training gave staff the skills to identify with the vulnerable adult or child. Staff told us they engaged with vulnerable patients with care and tact. The consent policy identified vulnerable patients may feel they were being pressured into treatment of care. Staff told us they were mindful to ensure that vulnerable patients were enabled to make informed decisions. This meant taking more time to show support and commitment to the patient's best interests.
- Staff considered people's needs when they visited the service. The service had a number of patients and relatives visit the base to ask questions or offer their thanks. The service recognised it was not suitable to meet patients and relatives in the office environment.

The service created a relative and patient room for them to sit and talk to staff about any concerns, questions or feedback they had. This room was welcoming and comfortable and showed that the patient was at the heart of everything they did.

Access and flow

- Access to the HEMS service was via the 999 NHS ambulance trust emergency operations centre. Based at the centre was the HEMS desk that was managed by Kent, Surrey and Sussex Air Ambulance Trust dispatchers. The HEMS desk sat alongside the NHS Ambulance trust's critical care desk that was managed by their paramedics. The Kent, Surrey and Sussex Air Ambulance Trust dispatchers screened all calls that came into the centre and assigned the HEMS team as appropriate. Data showed that 99.9% of the calls dispatched to the HEMS crew were covered. There were no unfulfilled calls within the reporting period, from January 2017 to January 2018.
- Dispatchers prioritised care and treatment for people with the most urgent needs using rapid dispatch criteria. The service had an effective tasking system in place so dispatchers could assign HEMS to the appropriate job. The tasking system was created around a criteria list of key triggers found in the mechanism of injury, the condition of the patient and the location of the job. Some calls were tasked to HEMS with just one trigger, for example, a fall from the second floor or higher. Other calls required two triggers such as a serious electrocution injury (trigger one) in a rural location (trigger two). We reviewed the rapid dispatch criteria. This clearly defined which calls were most likely to benefit from a HEMS response.
- The service had an effective rapid dispatch process to review the suitability of calls dispatched to HEMS. Once the HEMS desk had identified rapid dispatch criteria triggers they checked there was HEMS availability and then dispatched the HEMS crew. This process was completed as quickly as possible. After the call had been dispatched to the HEMS crew, the critical care desk was informed. The critical care desk clinically reviewed the incident, if they agreed it was suitable for HEMS then the process would continue. If the critical care desk paramedic did not think the incident was suitable for HEMS they would contact the duty manager at Kent, Surrey and Sussex Air Ambulance Trust and have a peer

to peer process were they reviewed the call together. In the meantime, the HEMS crew continued to deploy without delay. If the duty manager, who had the final decision, decided the tasking system was incorrect then the crew were stood down. This rapid dispatch process ensured there were no delays during a peer to peer review.

- Dispatchers were supported in their decision-making and worked effectively with the NHS ambulance trust's critical care desk. Dispatchers could request support from the critical care desk paramedics as well as support from Kent, Surrey and Sussex Air Ambulance Trust's duty manager. The service reported a good working relationship between the HEMS desk and the critical care desk. The duty manager was available throughout their shifts to ask for advice on any tasking concerns or queries they had.
- The service had an effective system in place to respond to a request from the NHS ambulance trust's ground crew. When a crew arrived with a patient who they felt would benefit from a HEMS response, they contacted the critical care desk and requested HEMS attendance. The critical care desk would notify the HEMS desk dispatcher who would then follow the 'crew request' process, which included immediate dispatch. If the details handed over by the crew did not meet the triggers in the rapid dispatch process the dispatcher placed a call to the duty manager. The duty manager would then complete a clinical peer to peer review of the call with the critical care desk.
- Access for inter-hospital transfers were managed and assigned through the HEMS dispatch desk, which followed the immediate dispatch process. Dispatchers would only commit an aircraft for inter-hospital transfers if there was a time-critical need for the patient.
- A clinician assessed every call they were responding to, to make sure it justified a HEMS exemption in flight. A HEMS exemption is much like the road exemptions applied to an emergency ambulance when using blue lights. Aviation rules and regulations require commercial aircraft to adhere to certain flight rules. A HEMS exemption can be claimed to enable the HEMS aircraft to be released from certain requirements of those rules.

The aircraft captain's decision to claim an exemption can only be made if a clinician first deems the patient requires emergency, rapid, essential and immediate response or transport.

- The NHS ambulance trust was informed of the availability of crews. The HEMS desk was notified when a crew returned to base and were available for deployment. They shared this information with the NHS ambulance trust critical care desk.
- The service communicated any delays to the local Ambulance NHS Trust. If deployment was delayed this would be reported as an incident through the incident reporting system and would be shared with the NHS ambulance trust.
- Patients had timely access to urgent treatment. The staff, management team and directorate placed high importance in ensuring calls were quickly assessed and dispatched. The Executive Director of Service Delivery told us they would rather crews were stood down after dispatch than delay critical intervention to a patient while criteria was debated. This was why all calls deemed to trigger HEMS were dispatched and deployed until told otherwise.
- The service effectively measured tasking efficiency by monitoring the number of calls missed. The service responded to 2,133 incidents in the reporting period, from January 2017 to January 2018 and 17 (less than 1%) calls were missed during this time. Missed calls were the calls that were either not identified as falling within the rapid dispatch criteria or where one of the services resources was not immediately available to respond as a result of already being committed to another incident. These missed calls were recognised through a variety of channels, for example, when a trauma call was pre-alerted into hospital by the NHS ambulance trust's ground crew or when the trauma network governance log highlighted a trauma call that Kent, Surrey and Sussex Air Ambulance Trust had not responded to. Any job that was flagged as a miss was reviewed by the duty manager.
- Action was taken to minimise the time people had to wait for treatment. If the location was close to the base and it would be quicker to respond by response car then crews would choose to deploy using the response vehicle.

Learning from complaints and concerns

- The service received two informal complaints and no formal complaints within the reporting period, from January 2017 to January 2018.
- The service had effective processes in place to investigate and learn from complaints. The service had a current complaints standard operating procedure. The policy clearly described the complaints procedure. The policy made specific reference to timelines and response deadlines to ensure staff kept the complainant informed. The policy reflected national professional guidance, for example, the Department of Health guide, Listening Responding Improving; A guide to better customer care (2009).
- Patients were enabled to make a complaint or raise concerns. The service left calling cards with patients and relatives, which gave them details of how to contact the service with any questions. The service had patient leaflets that detailed how concerns or complaints could be raised and these were available for patients and their relatives if any concerns were raised with the crew.
- Patients were encouraged to make a complaint or raise concerns and the system was easy to use. We reviewed the service website, this clearly displayed the service complaints procedure and detailed how to make a complaint or raise a concern. Contact details were clearly displayed and easy to navigate to, with a dedicated concerns email address, postal address as well as a phone number. The service was also easily contactable via a variety of social media platforms.
- People were given the help and support they needed to make a complaint. The service welcomed complaints as an opportunity to learn and develop. The website stated 'We will always treat you with courtesy and respect, listen to what you say [and] keep you informed'. This gave people, who wanted to raise a concern, confidence that they would be supported. The service also displayed contact information for an advocacy service to signpost people to independent organisations who could assist them with raising a complaint.
- Complaints were handled effectively and confidentially with a formal record kept. Service policy was to respond

to complaints within 25days of receipt. Both complaints received were responded to within this period and the service had kept a formal record of both complaints received during the reporting period.

- The outcome of complaints was explained appropriately to the complainant. We reviewed the service's response to one complainant. The response was kindly written and without any defensive tones. Details of the investigation were openly shared. The response addressed and answered all concerns raised by the complainant and offered a sincere apology.
- Lessons were learned and action was taken as a result to improve quality of care. The second complaint received was from a parent of a child who had been unable to travel with their child to the hospital. The service investigated and determined that the crew had not correctly prioritised the importance of allowing a parent to travel with their child and should have off loaded a member of the crew to make room for a parent.
- Lessons were effectively and widely shared with others. As well as a full investigation into the complaint from the parent, the staff involved took part in research that looked into the importance of parental involvement. This research paper was published in an international peer journal, The impact of parental accompaniment in paediatric trauma: a helicopter emergency medical service (HEMS) perspective. This showed staff were involved in a virtuous dedication to learning, improvement and sharing findings.
- Lessons were effectively shared internally. All complaints were reviewed at the operational risk management group. Feedback was shared with the staff involved and learning was shared to the rest of the staff through emails, minutes and discussion at governance days. All staff we spoke with could tell us the learning from both complaints. Staff told us that wherever safe and possible they would try to accommodate a parent during transport, even if this meant a member of the crew travelled by alternative methods.

Are emergency and urgent care services well-led?

Leadership of service

- The service had a structured senior management team led by the Chief Executive officer. The senior management team was made up of the Executive Director of Service Delivery, the Medical Director and the Associate Medical Director. The service had seven governance leads, who reported to the senior management team.
- Leaders had the skills, knowledge, experience and integrity they needed. The Chief Executive officer was accountable to the board of trustees. The board of trustees was made up of an experienced range of clinical and non-clinical staff that had significant experience in senior roles.
- Leaders had the capacity, capability and experience to lead effectively. The senior management team had extensive experience in trauma, HEMS and pre hospital care. Leaders were passionate about their roles and executed them with care and commitment to their staff.
- Leaders had an inspiring shared purpose to deliver and motivate staff to succeed. We saw that leaders encouraged appreciative and supportive relationships between staff. Leaders took on dual roles, which meant they were able to understand challenges from within and address them. Leaders spoke highly of their staff, and this was returned.
- Leaders were visible and approachable. 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. At least one director or senior manager attended every governance review day, we also saw on both days of our inspection that the senior management team ate breakfast and lunch with the rest of the team and crew. Staff told us they often all ate together. Positive relationships were embedded both socially and operationally.
- The service valued their dispatchers and ensured that being based remotely did not exclude them from the team. Dispatchers attended governance days and flying days. Governance days enabled them to have face-to-face interaction with their team and management. Flying days gave them the opportunity to see patient care.

- The service had a clear mission and vision with quality and safety the top priority. Their mission statement was 'Striving to save lives by providing the best possible emergency medical care'. Their vision elaborated on their mission statement and included continuous understanding of their impact.
- The service had a clear set of values to support their vision. Their values were to be caring, innovative and considered.
- Staff knew and understood their value to be caring. This value stated they would 'provide the best possible care to everyone who needs' them, because they wanted to 'give everyone [they] treat the best possible chance of leading a full life'. All staff we spoke with showed an overwhelming commitment to providing the best possible care.
- Staff knew and understood their value to be innovative. This value said the service 'constantly strive to maintain the very highest standards in everything we do', 'we break new ground with our incredible level of expertise'. This value was clearly deep rooted within the service. We reviewed data that showed 91% of staff had participated in research that looked at new and improved ways of doing things. Many of these research projects were ground-breaking, for example, research on rapid sequence intubation protocols and the HEMS tasking system for non-clinical dispatchers. Staff showed excitement and enthusiasm to share their research with us.
- Staff knew and understood the value to be considered. This value stated they could 'be trusted to focus everything all of us do, every day, on our patients' and their staff would have a 'thoughtful and focused approach to inform each and every decision' and lastly everyone could depend on them'to be open, transparent and respectful'. All staff we observed during our inspection focused all of their discussions around the needs of their patients. All discussions were well thought out, challenged and debated to offer the best conclusion for their patients. Staff we spoke with were relaxed, comfortable, and open and transparent about the service and the way it operated.
- There was a robust and realistic strategy for achieving the priorities and delivering good quality care. We

Vision and strategy for this this core service

reviewed a strategy paper for 2016 – 2020 and the associated objectives. This paper was clearly laid out and identified well-defined objectives and measurements against them.

- The strategy was regularly monitored and progress reviewed against the objectives. For example, the risk management, clinical governance and innovation meeting reviewed the strategic objectives as a standing agenda in their quarterly meetings. All staff we spoke with knew the service strategy and the steps taken to achieve their objectives. We also reviewed the reporting matrix that measured the achievement of objectives. These were clear quantifiable and measurable outcomes that staff reviewed regularly.
- The service vision and values were developed with the views of staff, patients and volunteers. An external company interviewed paramedics, doctors, pilots, patients and volunteers. They also held focus groups. The information was collated and used to find common values that could be shared between both a healthcare and a charitable organisation.
- Progress against delivering the strategy was monitored and reviewed. The Chief Executive officer presented a quarterly summary on progress to the board of trustees.

Governance, risk management and quality measurement (and service overall if this is the main service provided)

- There was an effective governance framework to support the delivery of the strategy and good quality care. The board of trustees had overall responsibility for the service. Four committees reported to the board of trustees. These four committees reported on finance, service delivery, income and promotions. The risk management and clinical governance innovation group communicated information between the four committees to three key groups; business development, the senior management team and the business continuity committee. The senior management team was responsible for communicating on behalf of four further groups such as the service delivery and the operations risk management group.
- The board and other levels of governance within the organisation functioned effectively and interacted with each other appropriately. The framework showed strong lines of reporting information both up and down the

organisation. Medical, clinical, service delivery and risk management meetings all fed into the senior management team, who filtered key information to the board through sub committees.

- Meetings were effective and delegated responsibility efficiently. The structure was rigid and meetings were held routinely and regularly. Minutes we reviewed showed that adequate time was given to each meeting, with meetings regularly lasting over three hours. There were alternative decision-making arrangements in place for meetings held bi-annually. If anything occurred between meetings that needed immediate address, this ensured there was a suitable decision making process available.
- Staff were clear about their roles and understood what they were accountable for. Every standard operating procedure we reviewed detailed responsibilities of staff in varying roles. All staff we spoke with understood their role and could tell us what their responsibilities were including the responsibilities of each committee and meeting. The most recent staff survey showed that 98% of staff agreed or strongly agreed that they always knew what their work responsibilities were.
- The service ensured that clinical staff declared working arrangements, outside of the service, and monitored this to make sure staff were not working excessive hours. Where possible, the service collaborated with other employers to ensure staff did not work excessive hours. The provider told us it was more challenging to monitor the working hours of temporary staff. They managed this by monitoring their welfare more closely and discussed fatigue management with them.
- The governance framework and management systems were regularly reviewed and improved. The service reviewed the effectiveness and suitability of the governance structure regularly at board level. The service was reviewing the governance framework to improve the appraisal system. Teams were also regularly encouraged to suggest improvements to the governance structure.
- There was a complete understanding of performance. The governance structure was set out to review and monitor a wide variety of areas to have sufficient understanding of performance using the views of people, safety, quality, activity and financial

information. We reviewed meeting minutes. The service had oversight of these areas and they were discussed throughout the governance structure in relevant meetings. The board was given a report of performance at every meeting and had a full and thorough understanding of performance. The staff we spoke with felt they were adequately challenged at board level.

- There were comprehensive assurance systems that were reported and monitored. The service did not have key performance indicators. The service reporting framework was made up of a matrix of 15 reporting areas. Each metric corresponded to an objective. For example, to ensure (objective 1), the service monitored a number of metrics such as incidents by call type and time of day, availability of the HEMS crew and patient outcomes.
- Service metrics were improved according to patient need and not to reach targets. Most of these metrics did not have a target because the service reviewed them regularly as a team and discussed ways and reasons to improve them. Staff told us they discussed what the benefit to improving metrics were so they had a good understanding of why they were driving improvement. This, ultimately, was always to improve patient outcomes.
- Staff were actively involved in driving improvement.
 Staff were personally responsible for reporting on their own metrics. All staff discussed their data as a team to understand improvement and learn from each other's strengths. This was to engage staff so they understood how they personally contributed to the strategic direction of the service.
- In the absence of targets, the service was able to recognise when metrics required improvement. For example, staff recognised that there was benefit to patient outcomes if rapid sequence intubation was completed as soon as possible. The service looked at how they could improve their deployment times and make marginal gains to benefit the patient. This metric also drove the procurement of the new aircraft type that would reduce response times.
- Improving metrics and patient outcomes was the driver behind staff innovation and research. For example, research into 360-degree access within an aircraft. The service worked with aircraft designer to enable close to

360 degree access to the patient for the first time. This means that during air transport staff would be able to access the patient from all sides. This access would mean many procedures could take place on route to hospital, possibly including rapid sequence intubation. Although this was in the early stages of development, if successful, it would entirely transform how HEMS crews respond to patients.

- There was an effective and comprehensive process in place to identify, understand, monitor and address current and future risks. There was a systematic programme of clinical and internal audit. This was used to monitor quality and identify where action should be taken.
- There were robust arrangements for identifying, recording and managing risk. We reviewed meeting minutes for the operations risk management group. They showed a clear and well-managed meeting that covered a variety of issues and addressed each standing agenda item with the appropriate level of attention. Incidents, aviation and facility risks were standing agenda items, as well as a review of the risk register. We also saw that the time allocated for staff to raise any other business was well utilised. For example, we saw that adverse weather and the associated risks were discussed during the any other business section of the meeting.
- The service had a risk register that staff regularly reviewed and effectively identified the risks to the service. The service used a risk matrix to assess the likelihood and severity of possible risks. We saw that staff reviewed the risk register at the operations risk management group as a standing agenda. Staff also updated risk scores at these meetings.
- The risk register demonstrated effective identification and reporting of risk. All risks had clear ownership. Risks were re assessed and scored and this was clearly documented. This meant that there was effective oversight to the changing impact of risks throughout and beyond the reporting period.
- There was alignment between recorded risks and what staff told us the service risks were. The senior staff we spoke with all knew what the service risks were and knew what actions were being taken to mitigate those risks. For example, their biggest risk was the provision of

doctors. The service was committed to developing and retaining their doctors. The Chief Executive officer recognised that doctor numbers were low across healthcare in general, and told us the service placed high priority on developing and retaining their own staff, including doctors.

- The operational risk management group reviewed all incidents rated above seven out of ten. At this meeting, the staff reviewed investigation progress, identified trends and could close incidents once they were resolved. This group could also escalate incidents up to the risk management and clinical governance innovation committee to request a review of the actions or to request more resource to investigate the incident. The Chief Executive officer and five directors attended the risk management and clinical governance innovation committee, quarterly. The senior management team had authority to make decisions on behalf of the risk management and clinical governance innovation committee, if required, in between the quarterly meetings.
- We reviewed three sets of meeting minutes for the operational risk management group. Incidents were a standing agenda. The minutes showed clear discussion of all incidents and actions arising from them.
- There was ongoing, consistent progress towards safety goals reflected in a zero-harm culture. All staff received crew resource management training. Crew resource management is a procedure used to train staff to manage in environments where human error can have devastating effects. Staff used the system to enhance communication, leadership and decision-making.
- All of the policies we reviewed were in date, current and ratified. All policies had clearly been written and individualised for the purpose of Kent, Surrey and Sussex Air Ambulance Trust. The policies had been carefully written, researched and clearly presented, in particular the service's business continuity policy. There was also evidence of regular updates to standard operating procedures and any changes were effectively communicated to staff.

Culture within the service

• There was a positive culture throughout the service. The positivity and enthusiasm from all members of staff,

from the Chief Executive officer, to the pilots, to the service delivery teams to the crew was overwhelming. All staff demonstrated a passion to drive improvement and provide the best possible care.

- Staff were proud of the organisation as a place to work and spoke highly of the culture. There were consistently high levels of constructive engagement with staff. In the most recent staff survey (October 2017), 94% of staff said they often or always looked forward to going to work.
- Staff felt respected and valued. The service had a genuine positive culture and commitment to developing staff. All three members of the senior management team separately told us how proud they were of their staff when they saw them presenting their research to the public. A room was dedicated to the presentation of staff research posters that demonstrated this pride. Staff told us they felt "incredibly valued" and another told us they felt "proud to be part of such an incredible organisation that encourages progression". These were powerful and genuine statements that showed staff felt truly valued. The most recent staff survey showed that 100% of staff agreed or strongly agreed that they were trusted to do their job.
- The culture encouraged candour, openness and honesty. The culture was enthused with 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 had been given. The relationship with leaders was so open and positive that staff felt supported and able to be honest and open about any aspect of their roles.
- There was no evidence of a blame culture, and staff were eager to seek support and advice in any areas they felt uncertain in. We saw evidence of this interaction between staff. They openly discussed their decision on a job and asked their colleagues, including leadership, if they had alternative ways they would have managed the scenario. In the most recent staff survey, 93% of staff felt the organisation treated them fairly when they were involved in an error, near miss or incident.
- There was a strong emphasis on promoting the physical health of staff. At the start of governance days, staff routinely took part in physical training delivered in the form of exercise drills.

- There was a strong emphasis on promoting the emotional and mental safety and wellbeing of staff. HEMS crew often faced traumatic scenes in their day-to-day work. Staff were trained in trauma risk management (TRiM). This is a peer-developed psychological support system designed to enable colleagues to provide support to each other following exposure to a traumatic incident. TRiM was a method of preventing post-traumatic stress disorder (PTSD). This showed that the service took proactive action to look after the mental and emotional wellbeing of their staff.
- Staff supported each other to ensure their colleagues' workload did not overwhelm them. Stress is a human factor that affects judgement. The service trained staff to be able to recognise when a colleagues workload was too high so that they could offer support. This ensured colleagues were able to make accurate decisions when in a challenging environment.
- Staff and teams worked collaboratively and shared responsibility to deliver good quality care. Staff were encouraged to work as a team and make decisions together. The service encouraged paramedics to lead on a variety of jobs and this further reinforced the collaborative relationship between the paramedic and doctor crew.
- Crews knew their individual roles and worked well within their teams. We reviewed a crew debriefing on a job with the rest of the team, during this debrief the team discussed the importance of knowing how each other were feeling during the course of the job. The recent staff survey showed that 100% of staff either agreed or strongly agreed that they were able to make a suggestion to improve their team.
- Staff could access confidential support when required. The service provided access to counsellors. This was confidential and while the service collated data on how often the counselling service was used, they did not know who had used it or why. Data showed this service had been utilised by the crew during the reporting period.
- The service created a staff group to contribute to and implement change. A recent staff survey showed that 60% of staff agreed or strongly agreed they were involved in deciding changes introduced in their work area or team, 39% neither agreed nor disagreed and

12% disagreed. We asked the service how they had acted on this data. They told us they had been through a lot of change and were aware that staff did not feel fully involved. The service have learnt from this and created a staff group. This group has been created specifically to have an input in change. For example, this group was central to the design and procurement of new flight suits.

Public and staff engagement (local and service level if this is the main core service)

- The service gathered patients' views and experiences to shape and improve services. The service encouraged patients and their relatives to visit the base and collected feedback from patients where possible. The service acknowledged that collecting feedback from patients was a challenge. They were currently running a research project with a local university looking at ways to collect feedback from patients more effectively.
- The service effectively engaged with over 200 ٠ volunteers. The fundraising team arranged and managed a variety of events to engage with the public and raise funds for the charity. Talks were provided to local schools and businesses to raise awareness of the services the Kent, Surrey and Sussex Air Ambulance Trust provided. Community events were organised, for example, golf days, and people were encouraged to take part in 'challenge events'. These were once in a lifetime challenges to raise money. A patient we spoke with spoke very highly of the volunteer scheme. The service mission statement recognised that they were able to provide the HEMS service due to 'the generosity of [their] supporters and through the dedication and pioneering spirit of [their] people'.
- The service effectively engaged with other members of the public. The service worked closely with a local university and invited students to attend their annual conference.
- The service website provided a large variety of information for the public. Recent missions were publicised so the public could understand and see examples of the critical lifesaving treatment the HEMS teams provided. The website also showed a variety of ways to get involved and displayed latest news and updates of interest to the public such as fundraising achievements.

- The service managed and kept social media pages up to date, current and relevant. We reviewed the social media pages. These pages showed recent fundraising activities, real life stories, interesting facts, how to book a talk and a variety of photos taken of crews. These pages engaged the public and contained interesting and well thought out information. We also saw powerful achievements from relatives who were supporting the service following the loss of their family members.
- Staff views and experiences were gathered and learnt from to shape and improve culture. We reviewed the most recent staff survey. This was a comprehensive and thorough survey that covered a variety of key findings and a variety of questions that helped the service to understand their staff better.
- Both leaders and staff understood the value of raising concerns. Crew resource management was embedded throughout the service. Crew resource management was instilled and discussed at governance days to ensure that all staff understood the importance of raising concerns with their peers without any fear of causing offence or judgement.

Innovation, improvement and sustainability (local and service level if this is the main core service)

- We saw examples of commitment to care and no examples where financial matters compromised care.
 For example, the service extended shifts to meet demand, without additional funding. The service had ensured they were able to sustain this in the long term.
- The safe use of innovative and pioneering approaches to care and how it was delivered was actively encouraged. The service supported staff to take part in research. We reviewed seven of 19 published research papers authored by Kent, Surrey and Sussex Air Ambulance Trust staff. Ninety-one per cent of their staff had taken part in research.
- All staff were genuinely passionate and committed to using recent research to improve the quality of patient care. All staff we spoke with were enthused to tell us about new research they had been or were currently involved in. For example, the 'availability of time' was a piece of research about increasing efficiency by making small gains. Staff were really on board with this new research and told us that even saving a few seconds could have large gains for the patient.

- Leaders and staff were focused and committed to continuous learning, and improvement and innovation. The service developed and delivered a new training programme that had been delivered to external NHS healthcare professionals from across the South East. This programme was funded, supported and endorsed by Health Education Kent, Surrey and Sussex.
- The service were leaders in their field in a number of areas. Staff we spoke with were proud to tell us that at the time of inspection the service was the only 24/7 helicopter emergency medical service (HEMS) in the country. These meant patients could be responded to by helicopter during diminished light. The service responded to 78% of calls by helicopter during night time hours. The service were also involved in the development of new microwave brain scanning technology which would bring quick and accurate brain scanning equipment to the pre-hospital environment.
- Staff were focused on continually improving the quality of care. The service was regularly invited to present at conferences to help develop pre hospital care. For example, the service was invited to present at the Association of Air Ambulances' national conference, the Icelandic Medical Association conference and the German Air Rescue education conference. The service was also invited to present at other key organisations. For example, The Scottish National Government invited the service to present and inform the Scottish Trauma Network development.
- Improvements to quality and innovation were recognised and rewarded. The HEMS dispatch process was selected for a prize presentation at the UK National Retrieval conference and the service was nominated for a national award for an innovative stroke thrombectomy pathway delivered in partnership with NHS acute sector partners.
- Staff research papers were influential among healthcare professionals. Staff published their research papers in medical journals such as the Air Medical Journal and Bio Med Central Emergency Medicine. A Kent, Surrey and Sussex Air Ambulance Trust research paper on anaesthesia protocol was voted in the top ten most influential papers by the journal in Critical Care.
- Staff proficiency was identified and awarded at the highest levels. The NHS ambulance trust awarded the

Chief Executive officer commendation, and The Queen awarded the service's Associate Medical Director an MBE for services to emergency healthcare in 2017. An MBE is a Member of the Most Excellent Order of the British Empire. The Queen gives this award, to an individual, for outstanding service to the community. This was the second staff member of Kent, Surrey and Sussex Air Ambulance Trust to be awarded an MBE, the Medical Director had also received this award.

Outstanding practice and areas for improvement

Outstanding practice

- Safe innovation was celebrated and research was encouraged. There was a clear proactive approach to seeking out and embedding new and more sustainable models of care. The service had also published a variety of leading research papers that had received recognition, such as the top 10 most influential paper.
- The service were leaders in their field in a number of areas. The service provided the only 24/7 helicopter emergency medical service (HEMS) in the country. The service was also regularly invited to present at conferences to help develop pre hospital care.
- Staff took the time to interact with people who used the service in a respectful and considerate manner. Patients were able to come back to the base at a time to suit them to aid their recollection and recovery.
- Staff were proactively supported to acquire new skills and share best practice. The service was dedicated to tailoring programmes to individual's needs and aspirations. Each member of staff had been assigned a consultant educational supervisor who helped develop their personal development plan and training needs.
- The service was recognised for providing good team work and partnering with other providers. The

service was awarded 'team of the year' by the local NHS ambulance trust. They were also awarded 'partner of the year' by the local fire and rescue emergency services.

- There were effective systems to manage and share information that was needed to deliver effective care. This included the sharing of scans, blood tests and coroner reports. The service used this follow up data to assess the effectiveness of care given on scene to drive improvement.
- There was a strong emphasis on promoting the emotional and mental safety and wellbeing of staff.
 Staff were trained in trauma risk management (TRiM), a peer-developed psychological support system designed to enable colleagues to provide support to each other following exposure to a traumatic incident.
- There was effective collaboration and support across all staff groups and a common focus on improving quality of care and people's experiences. The positivity and enthusiasm from all members of staff we spoke with was overwhelming. All staff demonstrated a passion to drive improvement and provide the best possible care.