

Air Ambulance Operations Headquarters

Quality Report

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

Ratings

Overall rating for this location	Outstanding	
Are services safe?	Outstanding	
Are services effective?	Outstanding	
Are services caring?	Outstanding	
Are services responsive?	Outstanding	
Are services well-led?	Outstanding	

Summary of findings

Letter from the Chief Inspector of Hospitals

Air Ambulance Operations Headquarters is operated by Kent, Surrey & Sussex Air Ambulance Trust. The service provides emergency and urgent care. 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 respond by air.

We inspected this service using our comprehensive inspection methodology. We carried out a short notice announced inspection on 16, 17 January 2020.

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.

We have not previously rated this service. We rated it as **Outstanding** overall.

- The service provided mandatory training in key skills to all staff and made sure everyone completed it.
- Staff understood how to protect patients from abuse and the service worked well with other agencies to do so. Staff had training on how to recognise and report abuse, and they knew how to apply it. Staff and managers worked together with external stakeholders to safeguard their patients.
- The service controlled infection risk well. Staff used equipment and control measures to protect patients, themselves and others from infection. They kept equipment, vehicles and premises visibly clean.
- The design, maintenance and use of facilities, premises, vehicles and equipment was innovative and kept people safe. Staff were trained to use them. Staff managed clinical waste well.
- People were protected by a strong comprehensive safety system, and a focus on openness, transparency and learning. A proactive approach to anticipating and managing risks to people who used services was recognised as being the responsibility of all staff. Staff identified and quickly acted upon patients at risk of deterioration. External organisations were actively engaged in assessing and managing anticipated future risks.
- The service had enough staff with the right qualifications, skills, training and experience to keep patients safe from avoidable harm and to provide the right care and treatment. Managers regularly reviewed and adjusted staffing levels and skill mix and gave bank staff a full induction.
- Staff kept detailed records of patients' care and treatment. Records were clear, up-to-date, and stored securely. They had innovative ways to make patient information more easily available to all staff providing care.
- The service used strong comprehensive systems and processes to safely prescribe, administer, record and store medicines. The service took a proactive approach to improving their medication safety.
- There was a genuinely open culture in which all safety concerns raised by staff and people who use the service were highly valued as integral to learning and improvement. All staff were open and transparent, fully committed to reporting incidents and near misses. The level and quality of incident reporting showed the levels of harm and near misses, which ensured a robust picture of quality. There was ongoing, consistent progress towards safety goals reflected in a zero-harm culture. Learning was based on a thorough analysis and investigation of things that went wrong.
- There was a truly holistic approach to assessing, planning and delivering care and treatment to people who used the service. There was a safe use of innovative and pioneering approaches to care. New evidence-based techniques and technologies were used to support the delivery of high-quality care.

Summary of findings

- Staff assessed and monitored patients regularly to see if they were in pain and gave pain relief in a timely way. They supported those unable to communicate using suitable assessment tools and gave additional pain relief to ease pain.
- All staff were actively engaged in activities to monitor and improve quality and outcomes. Opportunities to participate in benchmarking, peer review, accreditation and research were proactively pursued. High performance was recognised by credible external bodies.
- The continuing development of staff skills, competence and knowledge was recognised as being integral to ensuring high quality care. Staff were proactively supported to acquire new skills and share best practice.
- Staff, teams and services were committed to working collaboratively and had found innovative and efficient ways to deliver more joined-up care to people who use services.
- Staff supported patients to make informed decisions about their care and treatment. They followed national guidance to gain patients' consent. They knew how to support patients who lacked capacity to make their own decisions or were experiencing mental ill health.
- People were truly respected and valued as individuals. Feedback from people who use the service and those who were close to them was continually positive about the way staff treat people. People thought that staff went the extra mile and the care they received exceeded their expectations. Staff were highly motivated and inspired to offer care that was kind and promoted people's dignity.
- People's emotional and social needs were highly valued by staff and were embedded in their care and treatment. Staff provided emotional support to patients, families and carers to minimise their distress.
- People who use services were active partners in their care. Staff were fully committed to working in partnership with people. Staff always empowered people who use the service to have a voice and to realise their potential. Staff highly valued the patient's relatives and those close to them.
- The involvement of other organisations and the local community was integral to how services were planned and ensured services met the needs of local people and the communities served.
- People's individual needs and preferences were central to the planning and delivery of tailored services. The service made reasonable adjustments to help patients access services.
- People could access the service when they needed it and received the right care in a timely way. The service had developed innovative ways to improve the access people had to the service.
- It was easy for people to give feedback and raise concerns about care received. There were active reviews of complaints and how they were managed and responded to, and improvements were made as a result across the services.
- Leaders had an inspiring shared purpose, strove to deliver and motivate staff to succeed. Leaders had the skills and abilities to run the service. They understood and managed the priorities and issues the service faced. They were visible and approachable in the service for patients and staff.
- The service had a vision for what it wanted to achieve and a strategy to turn it into action, developed with all relevant stakeholders. The strategy and supporting objectives were stretching, challenging and innovative while remaining achievable. These were aligned to local plans within the wider health economy. Leaders and staff understood and knew how to apply them and monitor progress.

Summary of findings

- There was a strong culture that was centred on the needs of patients. Managers across the service promoted a positive culture that supported and valued staff, creating a sense of common purpose based on shared values to deliver high quality person-centred care. The service provided opportunities for career development and staff could raise concerns without fear. Staff were proud of the organisation as a place to work and spoke highly of the culture.
- Leaders operated effective governance processes, throughout the service and with partner organisations. Staff at all levels were clear about their roles and accountabilities and had regular opportunities to meet, discuss and learn from the performance of the service.
- Leaders and teams used systems to manage performance effectively. They identified and escalated relevant risks and issues and identified actions to reduce their impact. They had plans to cope with unexpected events.
- The service collected a wide range of reliable data and analysed it. Staff could find the data they needed, in easily accessible formats, to understand performance, make decisions and improvements. The information systems were integrated and secure. Data or notifications were consistently submitted to external organisations as required.
- Leaders and staff used innovative approaches to gather feedback from people who used services and the public. This was then used to plan and manage services. They collaborated with local, national, international partner organisations to help improve services for patients. There were consistently high levels of constructive engagement with staff.
- All staff were committed to continually learning and improving services. The leadership drove continuous improvement and staff were accountable for delivering change. Safe innovation was celebrated. There was a clear proactive approach to seeking out and embedding new and more sustainable models of care. Leaders encouraged innovation and participation in research.

Dr Nigel Acheson

Deputy Chief Inspector of Hospitals (London and South)

Summary of findings

Our judgements about each of the main services

Service

Emergency and urgent care

Rating

Outstanding



Summary of each main service

The service provided a helicopter emergency medical service to the people of Kent, Surrey and Sussex. This service looked for innovative ways to safely provide the high quality of care. They also shared improvements they found to improve care across the region, the country and the world.

Summary of findings

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Outstanding



Air Ambulance Operations Headquarters

Services we looked at

Emergency and urgent care.

Summary of this inspection

Background to Air Ambulance Operations Headquarters

Air Ambulance Operations Headquarters is operated by Kent, Surrey & Sussex Air Ambulance Trust. Kent, Surrey and Sussex Air Ambulance Trust is run by a registered charity. The service was founded, and the charity was set up in 1989 under the name of Kent Air Ambulance. In 2011 Kent Air Ambulance became Kent, Surrey and Sussex Air Ambulance Trust. It is an independent air ambulance service based in Redhill, Surrey. The service primarily serves the communities of Kent, Surrey and Sussex.

The Redhill location was registered in 2018 when the service moved its operations management from their site in Rochester. The service has three helicopters and four response vehicles.

The service has a service level agreement with an NHS ambulance trust. The service has dispatchers who work for the air ambulance service that managed the Helicopter Emergency Medical Service (HEMS) dispatch desk, based within the NHS ambulance trust's emergency operations centre.

The service has had a registered manager in post since 2018 at this location and the provider had a registered manager in post since 2011 at their previous location.

Our inspection team

The team that inspected the service comprised of a CQC lead inspector and a specialist advisor with experience of air ambulance services. The inspection team was overseen by Catherine Campbell, Head of Hospital Inspection.

Information about Air Ambulance Operations Headquarters

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:

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

During the inspection, we visited the service's base at Redhill and its staff based at the NHS trust emergency operation centre in Coxheath. We spoke with 16 staff

including; registered paramedics, doctors, support staff and management. We spoke with seven patients and one relative. During our inspection, we looked at five 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 had not been inspected at this location. However, we have previously inspected this site in 2018 when it was Kent, Surrey and Sussex Air Ambulance Trust Headquarters.

Activity (October 2018 to September 2019)

- In the reporting period October 2018 to September 2019 the service responded to 2,552 emergency and urgent care patient incidents.

Summary of this inspection

Ten doctors, 13 registered paramedics, five dispatchers, and 13 pilots worked at the service, which also had a bank of temporary staff that it could use. The accountable officer for controlled drugs (CDs) was the registered manager.

Track record on safety

- No never events

- 429 clinical incidents with five moderate harm incidents reported and 424 incidents reported as no harm, low harm, near miss.
- There were no reported incidents classified severe harm or death.
- No serious injuries
- Eight complaints.

Emergency and urgent care

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

Are emergency and urgent care services safe?

Outstanding 

We have not previously rated this service. We rated it as **outstanding**.

Mandatory training

The service provided mandatory training in key skills to all staff and made sure everyone completed it.

The mandatory training was comprehensive and met the needs of patients and staff. The service had 18 mandatory training modules. The staff were organised into five groups on their training matrix that determined which of the 18 modules each group were required to complete. This was based on what modules were relevant to each role. Modules included; bullying, risk management, whistleblowing, and manual handling.

Clinical staff completed training on recognising and responding to patients with mental health needs, learning disabilities, autism and dementia. Staff and managers told us this was completed as part of ongoing training sessions. All staff had one day out of every seven shifts as a day for training and governance.

Staff received and kept up-to-date with their mandatory training. We looked at records that showed compliance with mandatory training modules varied from 82% up to 100%. Managers told us this was normally better than this but at the time of giving the data to us the service had changed to a new mandatory training system two

months earlier to this submission. On inspection we saw these figures had improved, with 17 modules above 90% and the one remaining module was 83% for display screen equipment although this only represented six members of staff with one that had not completed the training as they had recently been employed.

Managers monitored mandatory training and alerted staff when they needed to update their training. Managers used a dashboard that showed current training compliance and reminded staff to keep up-to-date with training. Staff and managers told us they had recently changed the provider of their online training in response to staff feedback. Staff that also worked for other organisations reported they had to complete the same training in multiple places. Managers found a system that other providers used could automatically update individual staff training records when they completed training courses at any recognised provider. This service then adopted this system to support their staff.

The service ensured paramedics were appropriately trained to drive under blue lights. The service required all staff to complete training by the local police driver-training unit. This assessed driving standards and blue light driving. We saw completed certificates in staff records.

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



Emergency and urgent care

Safeguarding

Staff understood how to protect patients from abuse and the service worked well with other agencies to do so. Staff had training on how to recognise and report abuse, and they knew how to apply it. Staff and managers worked together with external stakeholders to safeguard their patients.

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. We looked at records that showed all clinical staff were trained to level three in safeguarding children and had completed this within the last three years. This was in line with the intercollegiate document Safeguarding Children and Young People: Roles and Competencies for Health Care Staff (2019). Non-clinical staff were trained to level one in safeguarding vulnerable adults and clinical staff were trained to level two in safeguarding vulnerable adults. This was in line with the intercollegiate document Adult Safeguarding: Roles and Competencies for Health Care Staff (2019).

At the time of our inspection, compliance with safeguarding training was 100% for all staff groups. 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. We saw completion certificates for safeguarding training modules in staff records we reviewed.

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. Their system had an indicator to show the safeguarding team had received the referral successfully, the duty manager checked each one of these records before closing it to make sure this confirmation was present.

Staff could identify the safeguarding lead by name and felt able to discuss any concerns they had with them. The safeguarding lead also had access to a safeguarding specialist within the local NHS ambulance service that they discussed complex cases with.

We looked at four staff files in which we saw completed employment checks which included references, photo identity, evidence of qualifications, and completed disclosure and barring service checks. The service repeated the disclosure and barring service checks every three years and all the records we looked at had up-to-date checks. These employment checks were compliant with Schedule 3 of Regulation 19(3)(a) of the Health and Social Care Act (Regulated Activities) Regulations 2014.

Cleanliness, infection control and hygiene

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

Patient areas were clean and had suitable furnishings which were visibly clean and well-maintained. We looked at two helicopters and two ground vehicles all of which were visibly clean and logs to show they had been cleaned. These vehicles were in good condition.

Cleaning records were up-to-date and showed that all areas were cleaned regularly. We looked at cleaning logs of the services base; staff had fully completed these and the base was visibly clean when we visited.

The service also had a deep clean programme for the helicopters once a month which was carried out by a specialist team of cleaners as the service found that having different people complete this cleaning led to variation in the quality of cleaning. The service had been assessing the quality of the cleaning by taking swabs before and after cleaning from several key locations



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within the helicopter. This was then logged to be reviewed for the effectiveness of removal of biological material. However, they had completed a study to look at the link between this monitoring method and effective removal of harmful contamination which showed no link, so the service had stopped this practice.

Staff followed infection control principles including the use of personal protective equipment (PPE). The four vehicles we looked at stored spare PPE, and the crew were also issued with personal PPE. We saw staff on the base using PPE when carrying out cleaning throughout the base. Staff reported using face masks and eye protection when carrying out airway management due to the risks and reviews of previous incidents.

Staff cleaned equipment after each patient contact. Crews reported they cleaned all equipment after each use and before leaving the base so that all equipment was clean when arriving at the scene with the patient. We saw vehicles had supplies of decontamination wipes on-board.

Sterile consumables were stored correctly and safely. We checked 15 sterile consumables which were all sealed and in date. All consumables were kept in lidded boxes to prevent dust contamination.

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 Statement 3 (2014), Infection prevention and control - Hand decontamination.

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 staff could decontaminate themselves and their uniforms. Staff returned through the dirty door into a decontamination room with uniform cleaning facilities. The decontamination room was an area staff could remove contaminated uniform to avoid spreading any bacteria or infectious material through the base.

The decontamination room contained an industrial washing machine. This machine contained a dosing system that dispensed the correct amount of washing

solution and maintained high water temperatures to decontaminate uniforms effectively. This room also contained an industrial drying machine to ensure the uniforms did not remain wet too long when waiting to dry. These systems could effectively decontaminate against MRSA. Staff entered the decontamination room, removed their contaminated uniforms and placed uniforms in the washing machine. Staff then put on a forensic suit and - showered before returning to their lockers in the clean area to put on clean uniform.

Environment and equipment

The design, maintenance and use of facilities, premises, vehicles and equipment was innovative and kept people safe. Staff were trained to use them. Staff managed clinical waste well.

The service had suitable facilities to meet the needs of patients' families. This included increasing the capacity of the aircraft, so they had the space to carry a family member as well as the normal crew and the patient. The service also had a family room at their base to have a comfortable space to talk with patients and their relatives if they visited the service at their base after being discharged from hospital.

The design, maintenance and use of the premises kept people safe. The design of the building considered the flow of activity with one large room for response crews that were on duty. The area closest to the aircraft was considered the 'hot' zone. This was where calls about patients were received, where pilots made flight safety decisions and where crews prepared to respond. 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. They also had an area between these that was for crew that were ready to respond but was designed for completing administrative tasks.

The layout of the station had been carefully designed with thought about how to improve efficiency. There were green walkways to identify where staff were to walk. These were built around the base and avoided the staff going through the operations room, so operations staff were not interrupted by other staff moving around the building.



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The service had facilities to keep their staff safe to respond to patients. These included a rest room for staff that felt fatigued to sleep to prevent staff feeling fatigued when responding to patients. They also had showers, changing facilities, a gym, and staff kitchen. The staff kitchen had facilities to cook, several fridges, comfortable seating to eat and rest. This room also had notice boards that staff put personal pictures on to make the kitchen space feel more relaxed.

The service ensured that all vehicles had current MOTs, services and insurance certificates. The service stored vehicle records on their electronic database that showed all four response cars had up-to-date MOT and insurance certificates and servicing was up-to-date. The system alerted the operational support team when vehicle checks were due.

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

The service had a positive safety culture around aviation. We saw that crew always ensured they approached aircraft from the front and made eye contact with the pilot before approaching. This was to ensure that the pilots always knew when crew were close to the aircraft. This was important as it was not safe to approach the helicopter when the pilots started the blades spinning until they were up to a safe speed. Crew undertook training every 90 days on aircraft safety which was checked by the captain at the start of each shift to ensure all crew had done this. This included any observers. This training included how to approach the aircraft as described above along with other safety information. Managers told us when visiting the helicopter maintenance hangar to remain in the safe areas and not to approach any helicopters. The helicopter maintenance hangar contained a decontamination shower for maintenance staff to use in the event of contamination to themselves with any hazardous material.

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 needed re-stocking.

Equipment stores were very well organised. Items in the equipment re-stocking room were clearly stored according to their use. The service stored all equipment on labelled shelves within labelled clear boxes. The also had a large store room for bulk storage. This was managed by the operational support staff and they were responsible for keeping the stock room used by crew topped up with equipment. The bulk storage room was used to allow them to order large quantities to get a lower price an item.

The service had enough suitable equipment to help them to safely care for patients. The service had a bulk storage room which they used to be able to store larger amounts of items that may be difficult to obtain due to supply or manufacturing issues. The service had a manager in charge of the stock levels and they told us they monitored any potential supply chain issues and either ordered larger amounts to last through a time they may not be able to obtain the product or locate an equivalent from another source.

The service trained staff on the use of all equipment. Staff told us before a new item of equipment was used with patients the managers put the piece of equipment out for staff to get familiar with it. They would also have a user manual for the device. Staff reported that this was essential for them to learn every detail of a new piece of equipment including how to charge the device, how to test it and how to identify common problems with it. During induction training staff are trained in the equipment used by the crew and then tested. Managers told us if staff were still unsure they provided additional training focused on any equipment that the staff are struggling with.

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.

Vehicle 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.



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The maintenance and use of equipment kept people safe. The service held up-to-date records of equipment maintenance and schedules. We looked at two records that showed the equipment had been serviced in line with the manufacturer's guidelines.

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 safe restraint of patients within the aircraft was a requirement of the Civil Aviation Authority. Adult harnesses could be adjusted to accommodate children.

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 allows the goggles to be adjusted to personally suit the wearers own eyes.

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 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 and a security code. 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. The crew's high value aviation helmets were also stored in a similar room.

Faulty equipment was efficiently and effectively managed. Staff reported faulty equipment to the operational support team who assigned the appropriate servicing team. The service had a policy for staff to follow when faced with faulty equipment. This included having spare equipment to be able to immediately replace items such as having a spare response car in case there was a problem with the car assigned to that response crew. The service also carried spare equipment with them when responding to patients. Staff told us about an issue they had had with a suction machine. They had tried their own

which was not working then the NHS ambulance service one which also did not work but then the crew used their own spare suction machine which worked. The crew reported this incident and we saw the incident log for this which showed the issue was with the battery for the device.

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 kit bags contained clinical waste bags and a sharps bin. We checked four bins within clinical preparation areas at the base and waste had been correctly segregated. The area where clinical waste was stored was clean, tidy and secure. An external contractor was responsible for the final collection of clinical waste.

Assessing and responding to patient risk

People were protected by a strong comprehensive safety system, and a focus on openness, transparency and learning. A proactive approach to anticipating and managing risks to people who used services was recognised as being the responsibility of all staff. Staff identified and quickly acted upon patients at risk of deterioration. External organisations were actively engaged in assessing and managing anticipated future risks.

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

Where the service did not use recognised triage tools, they had extensive research and data to support alternative methods. The service was looking at new methods of treatment working on the leading edge of innovation which led them to establish their own guidance around these areas. One of these areas was the services aim to be able to perform in-flight care, they



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were currently performing in-aircraft care. To develop their guidance around this and the goal of safe in-flight care the service had carried out academic research and simulation-based research. The simulation-based research involved the service creating a custom high detail simulator of the back portion of their helicopters. We saw some of these research papers that showed they had completed this work. The service had all staff get involved in research projects but also employed a professor to oversee the research that was conducted by the service.

The service managed risks positively. Two clinicians routinely performed a 'challenge and response' 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 response 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 leaving 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 the observations presented deterioration. This monitoring was constant and removed the risk of missing significant observations during intervals. The service also had a system that allowed this information to be sent to a monitor for a consultant to review the information. This allowed the consultant to provide clinical advice via telephone and monitor the patient's condition and alert the crew on the ground to any trend they had missed. The crew used this process to access specialist clinical advice when on scene and during transit. Staff told us support by consultants was effective.

The service had a system to transmit a patient's vital observations in real time so that a consultant could provide an additional set of eyes. These vital observations included blood pressure, electrocardiogram monitoring, pulse, and oxygen saturations. This allowed the consultant to provide suggestions of trends and possible causes. This technology was also used to show these vital

observations to the hospital staff, so they could better prepare for the patient's arrival. This was in a trial phase and the service was working with an international space agency on this project.

There was a safe and effective escalation process for deteriorating patients or situations that were beyond the abilities of one crew. Additional resources could be asked for via the Helicopter Emergency Medical Service (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 setting. Additional resources were asked for if the number of patients was too high for a single HEMS team to manage safely.

Staff knew about and dealt with any specific risk issues. The service responded to patients with serious injuries and some of these patients that had bled a large amount would normally have to wait until reaching hospital to receive blood products to replace the blood they had lost. However, as the service was aware this was a specific risk with their patients, they worked with a local NHS trust to allow the team to transport blood products and give these at the incident location. Blood products themselves pose a high risk to patients and as such the service audited their compliance with safety related to the process of handling of these products. We looked at the last two audits that showed the service achieved 100% on blood products traceability.

Staff took a proactive approach to anticipating and managing risks to people. There was an embedded culture that recognised risk reduction was 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 service had completed research on the effectiveness of using ultrasound to diagnose a collapsed lung on scene. They found that although this was possible to show a patient that had a collapsed lung that this test showed poor performance to rule out a collapse. The service used this information to reduce the risk to their patients by being able to treat the patient on scene if the test showed a collapsed lung. They also knew not to rule out a collapsed lung even if the test result did not show a



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collapsed lung. This work was also published in a national journal so as to share this learning with all emergency medical services across the country and the world.

The service used technology and investment to reduce the risk of encountering adverse weather during transport via helicopter. The service had a digital display covering a large wall that showed the current weather conditions and via a touch screen interface could display more detailed weather reports. The service had also set up seven weather stations of their own at significant locations to the service to get detailed reports of weather to inform flight safety. These locations included the Redhill base and the helipads at the major trauma centres.

The service had assessed the risks of flying at night and had introduced several measures to reduce the risks. The service had night vision goggles for their pilots and these were calibrated for each use. The service also had over 150 pre-planned landing sites. These had been surveyed by pilots during the day and assessed as safe places to land across the counties that they covered. These allowed crews to have a safe place to land and then either the police or a land-based ambulance crew would meet them on the ground to take them to the patient. The pilots would often find a safe place to land at night closer to the scene, but these pre-planned landing sites acted as a backup.

Staffing

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

The service had enough staff to keep patients safe. They had enough paramedics, doctors and pilots to cover shifts that supplied two response crews 24 hours a day, seven days a week. These consisted of two pilots, a paramedic and a doctor.

Managers accurately calculated and reviewed the number and grade of staff needed for each shift in accordance with national guidance. Managers ensured

that there was always two fully staffed crews. They had a list of bank staff that they contacted if staff were unavailable to work due to sickness or to cover other unexpected absences.

Rotas and shift patterns were aligned so 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.

All staff had breaks during the shifts to remain alert and safe to respond to patients needs. This included having access to a rest room so that crew and pilots had a place to sleep when needed to recuperate. This was in a quiet area on the base and made up of a room with several sleep pods separated by walls and curtains.

The service had low vacancy rates. They had full staffing for all roles apart from first officer pilots that they were one short of their target of seven. The service had over recruited to their paramedic and doctor roles to ensure service delivery. The service had one new dispatcher that was going through their training, so the dispatch team were at the time of the inspection working with a team of five rather than six but expected this to return to normal soon. The service had managed this shortage by having the five remaining dispatchers cover the shifts of the sixth while they were training the new member of staff. Managers told us they were planning to recruit a seventh member of dispatch staff to add more resilience to this part of the service.

All staff, including bank staff, had a full induction that prepared them to support safe care for patients. We spoke with staff that had recently joined the service and they reported having a thorough induction and had the opportunity to gain experience of other roles and responsibilities of other people within the organisation.

Records

Staff kept detailed records of patients' care and treatment. Records were clear, up-to-date, and stored securely. They had innovative ways to make patient information more easily available to all staff providing care.

Patient individual care records were accurate, complete, readable and stored securely. The five patient records we looked at had been completed clearly with medications



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and interventions clearly recorded. 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. A team within the service designed this and were supported by managers to research what information needed to be included and the best way for this to be presented. This meant the record could not be completed without the minimum data entered. Records were saved securely onto the system and only managers and the clinician who completed the report had access to them.

When patients transferred to a new team, there were no delays in staff accessing their records. Arrangements for recording triage decisions were clear. Transport locations were clearly noted in the patient clinical record. The receiving hospital were either provided with a paper print out of the crews notes or an electronic copy depending on the facilities of the receiving hospital.

Medicines

The service used strong comprehensive systems and processes to safely prescribe, administer, record and store medicines. The service took a proactive approach to improving their medication safety.

Staff stored and managed medicines and prescribing documents in line with the provider's policy. The service had a standard operating procedure and policy which was up-to-date and had a review date. This covered ordering, storage, record keeping, administration and security of medicines. The policy reflected national professional guidance including the Department of Health (2007) 'Safer Management of Controlled Drugs. A guide to good practice in Secondary Care'.

The service ensured that medicines were ordered safely and securely. The service had a service level agreement with a local NHS trust that supplied medications for the service. For controlled drugs the pharmacy in the NHS trust kept a list of authorised signatures so that only authorised staff could order controlled drugs. The service emailed the order to the trust but when collecting the medications staff were required to bring the order book for the pharmacy to complete their checks before releasing the medications.

The service ensured medicines were only accessible by authorised personnel. Medicines were kept in an alarm activated room. Only medical staff and support staff with

authorised swipe cards and a security code could access this room. The system logged all entries to the room and provided this information to managers, so they could monitor who and when staff entered this room. This room was accessed from a corridor that was monitored with 24-hour video surveillance. Support staff needed access to this room to re-stock the medicines.

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. The service kept controlled drugs in a locked cabinet within the secure medicines room. We saw the keys were kept in a safe, secured by a pin entry system. The medicines we looked at were within their expiry date and the stock levels were accurate. The service had an up-to-date home office license for the storage of their medicines.

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. The operational support staff checked these records daily 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. We looked at records for the last seven days that showed fridge and room temperatures had not gone out of their target range.

The service ensured that medicines in kit bags were stocked, stored and carried. Medicines in kit bags, in response vehicles, were kept in a locked boot. Medicine bags that were not in use were held in a locked cabinet within the alarmed medicines storeroom. Staff followed current national practice to check patients had the correct medicines. Kit bags that were ready for use by the on-duty crews were stored in a locked cupboard within the operations room.

The service investigated every incident relating to medicines. They discussed these with the team at their next governance day. The teams had a governance day every seven shifts. They had identified errors recorded in their controlled drugs medication books as two crews used the wrong crew's book to record the medication they withdrew from the stock. The service has now made



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separate medicines cupboards for the two crews. Managers told us this now worked like running two separate wards so that all medicines were kept separate to simplify the process for staff and had reduced recording errors.

Staff followed systems and processes when safely prescribing, administering, and recording. We looked at five patient records that all showed medications had been prescribed, administered and recorded in line with national guidance which included recording information such as patient allergies, medication name, dose, route and time.

The service ensured that staff followed the services medicines management policy. The service conducted an internal audit of their medicine's management every six months and they had an arrangement for an external pharmacist to visit every six months to conduct an external audit. These were arranged so that an audit was completed every three months. We looked at four audits and saw that one issue identified was the use of cat litter to absorb medication for disposal and that dust from this may be able to contaminate the surfaces where medication was drawn up. On inspection we saw that they had removed this and replaced the cat litter with blue topped disposal bins specifically designed to dispose of medication.

The service ensured that medicines were appropriately and safely disposed of. The specifically designed medication disposal bins contained a de-naturing compound. De-naturing compound is a substance used for the irreversible disposal of medicines. This compound ensured liquid medicines were 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 that supported the service with this task.

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. We looked at records that showed staff had been recording medications use and wastage in line with the service's policy.

The service had systems to ensure staff knew about safety alerts and incidents, so patients received their medicines safely. The service had an electronic system to share vital updates and this then recorded which staff had read the update. Managers showed us how they monitored this process and said staff were quick to read these.

They had decision making processes to ensure people's behaviour was not controlled by excessive and inappropriate use of medicines. Staff and managers told us about incidents they had reported about their usage of a sedative medication that when used did not have the desired effect. The service responded to this by investigating what dosage of this medication other similar services across the world used. They found that several other air ambulance services reported similar problems and that they had trialled a higher dose of this medication that resolved the issue. The managers then approved the use of a higher dose of this medication. Staff reported that this had been effective.

Incidents

There was a genuinely open culture in which all safety concerns raised by staff and people who use service were highly valued as integral to learning and improvement. All staff were open and transparent, fully committed to reporting incidents and near misses. The level and quality of incident reporting showed the levels of harm and near misses, which ensured a robust picture of quality. There was ongoing, consistent progress towards safety goals reflected in a zero-harm culture. Learning was based on a thorough analysis and investigation of things that go wrong.

Staff raised concerns and reported incidents and near misses in line with provider policy. We looked at the service's incident reporting policy that was up-to-date and had a date to be reviewed. Incidents were reported on the service's intranet which was accessible from computers at the base or via their business mobile phones while out of the office at scenes. All staff we spoke with knew how to report an incident and told us about incidents they had reported recently.

Staff knew what incidents to report and how to report them. All staff we spoke to felt open about reporting any incident or near miss that they saw and would rather over



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report incidents than risk missing an incident that show be reported. The high number of near miss or no harm incidents reports shows that staff were doing this. For example, we saw an incident had been reported as the crew forgot to pick up one of the medication bags on leaving the base to get aboard the helicopter but then realised and returned to the base to collect the bag before the crew left.

The service recorded 429 incidents from October 2018 to September 2019. Of the 429 incidents 424 resulted in low harm, no harm or a near misses. The high number of low harm, no harm and near misses reported showed the services commitment to a zero-harm culture. There were no never event and no incidents that resulted in serious harm or death.

There were five incidents that resulted in moderate harm. These included two that were reports of practice observed by crews of other services practice and two were injuries to staff. The last of these five was an incident that resulted in patient harm, this was a rash caused by a possible reaction to a blood product given to a patient. We saw records that showed the crew responded quickly to the rash and stopped the infusion and alerted the receiving hospital to the possible reaction.

The service also rated their incidents for their possible impact on service delivery. The service had seven incidents rated as significant impact. One of these was an alert raised from a local NHS ambulance service about a product with an identified manufacturing fault. Records we looked at showed that the service identified which batch was affected and removed all of these from their stock. Another was related to a piece of equipment that was damaged and therefore the crew were using the back up. The records we saw showed that this was logged, and a replacement item was ordered.

Staff we spoke with understood the duty of candour. They were open and transparent and gave patients and families a full explanation if and when things went wrong. The service had mandatory training for duty of candour and at the time of our inspection 96% of staff were compliant with this training. The service had not had any incidents that triggered the duty of candour over the past 12 months, but managers told us how they would support patients and staff if they had an incident that they needed to apply duty of candour to. Staff reported

that they felt they would be open and honest about any error or near miss and apologise to patients for these even if this did not meet the criteria for the formal duty of candour response.

Managers debriefed and supported staff after incidents. We saw that when the crew returned to the base after having visited a patient at a prison the duty manager led a debrief about the events of the patient's care. This included a discussion about a delay to leaving with the patient due to the paperwork needed from the prison. The manager reminded staff to report this via the incident reporting system and reviewed other actions the crew could have taken for discussion and learning. The manager also checked with the crew about their welfare as a result of this incident. Staff we spoke to told us this type of debrief was normal after returning to base.

Managers investigated incidents thoroughly. Incident records we looked at showed staff were involved in these investigations through interviews and self-reflection activities to produce statements that were used in the investigation process. We saw records that showed that staff had reported problems loading the stretcher onto the helicopter due to the positioning of the bridge. A stretcher bridge is a device that holds equipment above and around the patient while being attached to the stretcher. Managers investigated what had happened and the cause. They found that with practice this could be done efficiently so have marked this for practice with crews.

Staff received feedback from investigation of incidents, both internal and external to the service. We saw meeting minutes that showed staff received feedback about incidents from outside the service. For example, we saw that the rise in pressure on the acute NHS service had been shared with staff and they were given advice on how they were able to support this other service during this time.

Major incidents

The service had effective arrangements 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;



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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 National Ambulance Resilience Unit document “clinical guidance: medical support minimum requirements for a mass casualty incident” (2014).

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 allowed 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.

Staff understood their roles and how to react to a major incident being declared. Staff we asked told us they had a major incident card, and all knew where their card was. These cards included basic information about that person’s role during the incident and staff would use these to guide them in their initial actions. Staff knew how their roles fitted in with the wider team and believed in a team response.

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. Staff told us they had been involved in a simulation of a mass casualty response in a coastal town which had been useful to practice their response. This incident simulation involved the crew working in partnership with other agencies such as the acute ambulance service and the fire service. Managers also took part in table top scenarios to work through a multi-agency response to much larger major incidents than would be practical to organise a live simulation.

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 service had additional facilities at another location due to recent events at another service which highlighted the need for fall back facilities to prevent loss of service if the primary base became unusable. Managers told us they had a response car located at another site so that in the event of the loss of all resources at their Redhill site the service could still operate a limited response. The other location also had landing facilities for their aircraft so that if the aircraft were away from the site at the time then their helicopter, and crew could return to this safe site and continue to operate.

Are emergency and urgent care services effective?

(for example, treatment is effective)

Outstanding



We have not previously rated this service. We rated it as **outstanding**.

Evidence-based care and treatment

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

Staff followed up-to-date policies to plan and deliver high quality care according to best practice and national guidance. Standard operating procedures reflected up-to-date and relevant legislation and guidance set out by relevant national public bodies and committees including; The National Institute for Health and Care Excellence (NICE) and NHS England.

Crews worked to service guidelines. The service provided various standard operating procedures (SOP) for differing treatments and procedures. We looked at three and these were up-to-date and had review dates set. Clinical staff we spoke to knew about these standard operating



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procedures and knew how to find them if they wanted to refresh themselves on the information. Staff told us these were available on their phones and would sometimes review these on route to a scene if they wanted to remind themselves of a SOP that they did not often use. The service was conducting a research project in partnership with an NHS trust to develop a new SOP for transfer of patients that had suffered an out of hospital cardiac arrest to be flown to this NHS trust hospital for extra-corporeal membrane oxygenation. Extra-corporeal membrane oxygenation is a life support machine that replaces the gas exchange that would normally occur in the lungs, this is different to a normal life support machine as they would only carry out the action of breathing with the gas exchange still occurring in the patient's lungs. At the time of the inspection the service had transported several patients under this new SOP.

The service was assured new staff had read and understood policies and procedures. On induction, the service sent out all standard operating procedures and policies to new staff. Policies were shared via their online system and these tracked who has and had not read a policy or an update. Managers reviewed this information reminded staff that had not read the updates to do so.

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 clinical leads 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. The service had produced 27 published papers, over 30 presented research posters, four staff had completed a masters research project at the service and contributed to leading text books in their field. This included research on a new type of brain scanner that will be able to scan patients on scene. The service also has a professor they employ part time to work on research and support other staff with their projects. They also had two paramedics taking time out of frontline response to complete their PhD in paramedic science.

The service was pushing the boundaries of what care could be provided. They were using their simulator to produce enough evidence to show that inflight

treatments were safe for patients and safe for the aircraft. Managers told us they wanted to be certain of the safety and the benefit to patients before starting this method of care.

The service was using their research to support other services. The service had shared their research on supplying blood products to the scene of incidents with other similar air ambulance service. We looked at records showing the thanks for their help from these other services including the German Air Rescue service and the Spanish Helicopter Emergency Medical service.

Pain relief

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

Staff assessed patients' pain using a recognised tool and gave pain relief in line with individual needs and best practice. Staff told us they used a pain scale of one to ten one being very little pain and ten being the worst pain possible. However, they also told us most patients were unable to communicate their pain due to being seriously injured. Staff showed us they had small whiteboards that patients that were awake but unable to speak used to communicate in writing.

Staff supported patient that were unable to communicate their pain levels. Staff assessed these patients by looking at the quality and nature of pain by assessing the type of injury, body language and physiological signs, for example, increased blood pressure, respiratory rate and heart rate. Crews held strong pain-relieving medicines that a standard ambulance was unable to offer. This ensured patients were as comfortable as possible.

Two patients we spoke to, who had suffered significant injury, told us they had been given pain relief and could not recall being in pain while being treated by the air ambulance crew. The other patients we spoke with could not recall clearly the events of their experience due to the nature of their injuries. The service had a pre-flight check that included having pre-drawn up pain relief to be able to easily give additional pain relief during flight to the hospital.



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Staff prescribed, administered and recorded pain relief accurately. The five patient records we looked at showed that patient pain was monitored, and medication was given to prevent patients being in pain. The service's latest patient survey results showed that the twelve patients that could remember said that the crew had given them sufficient medication to control their pain. The other ten respondents reported not being able to remember. No patients responded saying they had not had enough pain relief.

Response times and patient outcomes

All staff were actively engaged in activities to monitor and improve quality and outcomes. Opportunities to participate in benchmarking, peer review, accreditation and research were proactively pursued. High performance was recognised by credible external bodies.

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.

Outcomes for people who used services were positive and consistent. Data showed that the intended outcomes for patients were being achieved. The service had identified that crews were spending longer on scene than the crews recalled. They had thought this was likely due to crews being so focused on their patients they lost track of the time spent on scene. Managers after discussion with crews decided the dispatcher would call out on the radio every five minutes they had been on scene. All staff we asked said they found this helpful to remind them of how long they had been on scene.

The service had conducted academic research on the impact of their crews on patient outcomes. This included a paper looking at the reduction in time spent on scene before transporting patients to hospital. We looked at this paper and it showed that with their crew the average time on scene was 21 minutes and without them 29.5 minutes. Shorter scene times were linked to better outcomes for patients.

The service had strong links with other providers and bodies who monitored and compared patient outcome data. They had a quarterly meeting with the acute NHS ambulance service they worked with to discuss their performance and look at areas for improvements. Feedback from the NHS ambulance service was extremely positive about the positive effect the air ambulance service had on patient outcomes.

Measuring the outcome of patients was challenging so the service tasked their professor to research how to best measure patient outcomes. They looked at how to measure the social impact of the air ambulance services work. They had also conducted research projects to look at the impact of individual type of interventions. One of these looked at the impact of the service transporting patients for thrombectomy after a stroke. Thrombectomy is the surgical procedure to remove a blood clot and needs to be completed quickly after onset of symptoms as the benefit declines by 5% an hour. This paper showed that the total time from symptom onset to arrival at hospital with the air ambulance was 220 minutes versus 270 minutes without the air ambulances support.

Competent staff

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

Staff were experienced, qualified and had the right skills and knowledge to meet the needs of patients. The service only took doctors within the last two years of their training to become consultants or qualified consultants. These doctors also had to be trainees in either anaesthesia or emergency medicine. The service only took paramedics with five years of post-qualification experience of working responding to emergencies.

Managers gave all new staff a full induction tailored to their role before they started work. All staff completed a three-week induction course that introduced them to the service and allowed them to complete role specific training. We spoke with two new staff that had completed this training recently and they said it had help them understand the service and they felt fully supported by



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their managers. All staff we spoke to told us they had been supported after their induction with a period of six to ten weeks of shadowing which varied based on a shared evaluation of their competency to work independently between the staff member and their manager.

The service was an accredited trainer for doctors to complete their 12-month sub-speciality training in pre-hospital emergency medicine. This was the only accredited training centre in the region. The accreditation was from the Intercollegiate Board for Training in Pre-Hospital Emergency Medicine.

Managers supported staff to develop through yearly, constructive appraisals of their work. We looked at four staff records that all contained an appraisal carried out in the last 12 months. All staff we asked told us they had a yearly appraisal with their line manager. Staff told us these were productive and focused on their development and how the service and their manager could support them. Staff told us they felt supported but not pressured to develop.

The service recorded their appraisal rates and for the substantive doctors, governance leads, substantive paramedics, bank doctors, bank paramedics and dispatchers the compliance rate was 100%. For the service's paramedic managers, the rate was 80%. Managers told us this rate was 80% as one of their paramedic managers was going to be leaving the service.

Managers supported staff to develop through regular, constructive clinical supervision of their work. There were clinical supervisors for doctors and for paramedics. These clinical supervisors would act as an extra member of crew and attend calls to observe practice and provided feedback for the crew. This clinical supervision was provided for about one in five flights. This was to support continued learning and improvement for the doctors and paramedics. Staff reported that they found this very helpful and supportive.

Staff across the whole service told us they felt supported by their leaders to develop their skills. Staff told us about how their managers supported them with developing custom development plans. They said that they came up with ideas of what they wanted to achieve, and their managers helped them structure these into achievable goals and identify support that they may need. One

member of staff told us about an expensive course that they wanted to attend, and their manager supported them with completing the necessary paperwork to apply for the funding.

The service also used body cameras to record each incident they attended which was used for learning. These videos were then downloaded to a standalone computer so that they could be viewed with the support of senior staff to help crew reflect and identify any learning from the incident. The video footage was encrypted and could only be viewed on one computer in the base that was not connected to the network to prevent any footage from cyber-attacks. Staff we spoke to about this process said they found it valuable to be able to calmly reflect on their actions in a calm space.

The governance leads, and managers supported the learning and development needs of staff. The service had one out of every seven shifts as a governance day that included completing class room and simulation training.

All staff were given time to complete their mandatory training and in addition were given ten days of study leave and an additional 12 days specialist interest leave to attend additional training of a related interest. Staff were also given a £1,000 budget a year to spend on extra training. Staff we spoke to told us if they wanted to spend more than this amount on extra training a year then they always had the support of the service to complete this.

The service had facilities that supported safe staff training. The service had a class room used for training sessions. The service also had a simulation suite that contained mannequins for practicing clinical skills.

Managers made sure staff received any specialist training for their role. The service had invested in creating a full-size helicopter cabin simulator. At the time of our inspection this was the only simulator of its type in the country. The service had worked with custom fabricators to create a high level of details to all aspects of the cabin simulator. This simulator had cameras fitted so that the simulation organiser could see what the crew were doing. The simulator also used a system to produce the sounds of the helicopter and air traffic control communications. These were combined to create a realistic setting for training and was used to research new methods of providing care. The service had produced research papers on their development of in aircraft treatment. This



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showed the advantages of performing procedures on their patients before taking off in the back of the helicopter. The service had taken this into account and was providing in aircraft care at the time of the inspection.

The simulator was also used to create complex simulations. These included telling one of the crews that a new symptom was about to present but not react to this to create added detail to the scenario. This scenario tested the fail safes to catch when a member of staff could miss something with a real patient. Staff said these simulations were very valuable to their learning. These simulations got all staff on the governance day involved, this included paramedics, doctors, pilots, support staff, dispatchers, and managers.

Multidisciplinary working

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

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. The service also had live monitoring setup with the major trauma centres so that the receiving hospital could start to assess the patient's condition before they arrived. This included observations such as blood pressure, pulse and electrocardiograph monitoring.

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 offered their local stakeholders' opportunities to work with the service to increase the effectiveness of the multidisciplinary working. This included offering the local NHS ambulance service a space once a week for a member of their staff to attend the air ambulance and act as an observer on missions.

The service also used their simulator to help train staff from other services. Staff from the fire service, police service and local NHS acute ambulance service were invited to take part in governance training days. Managers told us of one example that these staff would practice assisting in loading the patient onto the aircraft and carrying the stretcher as a team.

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. The service had recently taken their staff to share experiences with the Danish air ambulance service.

Staff were committed to working together with other members of the multidisciplinary team. All staff we spoke to knew that the best outcomes for the patients were achieved as a team working together. We saw a complaint that the service received from a member of NHS staff about the way that the crew interacted with them. The complaints log showed the crew had conducted structured reflection on this and noted that they would improve their communication strategy with crews already on the scene.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

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

Staff gained consent from patients for their care and treatment in line with legislation and guidance. All staff had a good understanding of the Mental Capacity Act and acted in the patient's best interests if they were unable to consent.

Staff clearly recorded consent in the patients' records. We looked at five records and all had consent considerations clearly recorded.

Staff understood how and when to assess whether a patient had the capacity to make decisions about their care. Staff we spoke with told us they would help patients to involve them in decision making and support them by explaining complex medical information in simpler ways



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to allow patients to understand. They also had a variety of methods to help communication which included whiteboards for patients to communicate in writing if they were unable to speak.

Staff received and kept up-to-date with training in the Mental Capacity Act. We looked at records that showed compliance rates with consent and capacity training for paramedics was 89% and was 100% for doctors.

Staff could describe and knew how to access policies and get accurate advice on Mental Capacity Act. Staff showed us they had access to all policy's and guidance on their work phones via an online storage system that allowed offline access so that staff could access these even if they had no phone signal.

Are emergency and urgent care services caring?

Outstanding



We have not previously rated this service. We rated it as **outstanding**.

Compassionate care

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

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 told us they often needed to cut a patient's clothing off to fully assess their injuries but that they would if possible do this in stages and cover the exposed part of the patient with a blanket and if not possible then after removing all their clothes and doing their assessment they would cover the patient up afterwards. Two patients we spoke with told us they did recall having their clothes cut off during the examination process, but that the crew quickly covered them with a blanket. A relative told us

police were asked to keep the road closed while the crew were caring for the patient so that they could protect their patient from the public walking past. In the latest patient survey results all the patients that could remember said they had their privacy and dignity maintained.

Feedback from people who used the service, those who are close to them and stakeholders was continually positive about the way staff treated people. People thought that staff go the extra mile and the care they received exceeded their expectations. All seven patients we spoke to were overwhelmingly positive about the care that they had received. When talking about their feeling about the way the crew looked after them one patient told us "they are true super heroes".

Patients said staff treated them well and with kindness. One patient told us although they do not recall much of their care due to the nature of their injuries they did remember one of the crew holding their hand in the aircraft which they said reassured them.

Emotional support

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

Staff understood the emotional and social impact that a person's care, treatment or condition had on their wellbeing and on those close to them. A doctor told us about a patient that needed to be put into a medically induced coma. Due to their injuries the doctor was aware that after they were anaesthetised the patient may never have woken up. They asked their relative to come and talk with the patient so that if this was to be their last words they could share them with someone they were close to.

Staff gave patients and those close to them help, emotional support and advice when they needed it. One of the patients we spoke to when talking about their experience of the air ambulance crew said, "the word I use for them is reassurance". Six of the seven patients we spoke with told us after making a recovery they visited the service at their Redhill base. They all reported that this had helped them emotionally with their recovery.



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Two of these patients told us about meeting crew that had provided them with care on the day of their injuries. They both told us this had helped them fill in the gaps in their memory of the events of the day.

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 relative told us they were told about the need to transfer their child to hospital and were talked through what to expect on the flight to hospital.

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 about speaking at a local cathedral during the provider's carol service about their experience as a patient of the service. They said that this was a very rewarding experience for them and would stay with them for a long time.

Understanding and involvement of patients and those close to them

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

Staff made sure patients and those close to them understood their care and treatment. Staff told us they kept relatives as informed as possible and that when possible they kept their patients informed of the treatment being given. However, they told us that often their patients were unconscious. Although only five patients that responded to the service's patient survey could remember they all reported they felt involved in choices about their care and treatment.

Patients and their families could give feedback on the service and their treatment and staff supported them to do this. Staff told us they gave out business cards to patients and relatives with their contact details on and that they had leaflets for any patients that wanted to give feedback. The service had also arranged with the local major trauma centres to keep a stock of feedback leaflets

for patients to be given when they were discharged from hospital. Managers from the service told us they had done this in response to patients often being unconscious when the crew handed over to the hospital staff.

The service took positive action to feedback from patients. The service told us one patient that visited the service told them that their only memory of their care was that they were cold. The service shared this with staff to make them more aware of this in the future. The service also introduced a question on their patient feedback survey to ask patients if they felt cold to monitor this more closely in the future. In the latest survey this showed five patients recorded feeling warm "most of the time" with six saying they felt warm "all the time". There were no patients reporting feeling warm "not at all" or "some of the time".

The patient's family and friends were kept informed about their loved one's care. Patients that we spoke to told us the crew either kept them updated directly or by asking the police to find their relatives and pass on the relevant information which would include which hospital they were being taken to. The latest patient survey results showed that all patients (20) that could remember said that their relatives were kept informed about their care. This also showed that the 21 patients that could recall said that their family and friends were told which hospital they were being taken to.

Are emergency and urgent care services responsive to people's needs? (for example, to feedback?)

Outstanding



We have not previously rated this service. We rated it as **outstanding**.

Service delivery to meet the needs of local people

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



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The service planned services to meet the needs of local people. The service had three aircraft which allowed them to have two response crews each with a helicopter and one that could be having maintenance. Two of these aircraft had larger cabin areas that allowed greater operational capabilities including in aircraft care and plans to provide complex procedures during flight.

The service worked with other providers to support them to meet demand. The service's dispatcher sat alongside the local NHS ambulance trust critical care desk. In the event of a critical incident, the two teams worked together to ensure they dispatched resources to support each other and meet the needs of the community.

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 it was not possible to transport patients by air, the NHS trust staff transported patients by road in their road ambulances while the helicopter emergency medical service (HEMS) staff travelled in the road ambulance to continue patient care. Staff told us they were dedicated and proud of their collaborative delivery of care with local NHS ambulance trust crews. We saw that staff were grateful for feedback from NHS staff about how they could improve their collaborative working.

The services provided and reflected the needs of the population served. The service regularly monitored any trends in calls assigned to the HEMS. This allowed them to analyse when demand was at its peak. The service had two response crews and these crews did staggered shifts so that there was always a crew ready to respond. This also allowed the crews handing over to not feel pressured to finish in case a call came in while they were handing over.

The service had worked with their partner agencies to allow them to offer new services to meet patient's needs. This included providing blood products to patients in the pre-hospital setting. The service had carried out a research project on the effectiveness of this new part of their service which showed they were able to give blood on average 85 minutes earlier than they would have received it without them. This project also showed that patients appear more haemodynamically stable when arriving at hospital after receiving blood products pre-hospital. This meant patients appeared less sick on

arriving at hospital as a result of having been given the blood products. However, the project concluded that there was a need for more research to understand the long-term effects on patient outcomes.

The service work with other services to provide a joint approach to meet the need of people across their region and across the world. The service worked with organisations such as; local NHS trusts, the Ministry of Defence, major trauma centres, the European Space Agency, and the German Air Resource service. They worked with these services on research to improve care and on integration to provide a more collaborative approach to healthcare.

Meeting people's individual needs

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

Staff were competent and understood the importance of considering the differing needs of patients. The service provided equality and diversity training as mandatory. We looked at records that showed 97% of staff had completed this training within the last year.

Staff communicated with patients in a way that they could understand. The latest patient survey result showed that 41% of patients said staff communicated with them in a way they understood with the remaining 59% saying they could not remember and with none saying that they could not understand the crew.

Interpreting support was available for staff in the treatment of patients whose first language was not English. Staff had access to a language interpretation telephone support team who provided language interpretation for healthcare.

The service supported patients that were unable to communicate verbally. Staff showed us small whiteboards that they used to allow patient to communicate in writing. Staff also had pictographic communication aids including one for pain that shows in a series of different faces how much pain the patient had. Patients could then simply point at the picture to communicate their level of pain.



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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. The base was wheelchair accessible for any visitors to the service.

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 setting. The service had a patient and relatives' room which had comfortable sofas, pictures, and a scent machine that supplied calming vapours. The crews and managers used this room to talk with patients and relatives when they visited the base.

Access and flow

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

People had access to the helicopter emergency medical service (HEMS) service when they needed it. Access to the service was via the 999 NHS emergency phone line. People phoned 999 and talked with the NHS ambulance service emergency operations centre staff and the air ambulance dispatchers monitored calls coming into the centre. These dispatchers listened in on calls that they had identified as a concern to see if they met the service's criteria for dispatch. The call taker only asked questions that were in their frameworks, but the HEMS dispatcher listening to the call could type additional questions to clarify information that may mean they need to dispatch their crew or not.

Dispatchers prioritised care and treatment for people with the most urgent needs using rapid dispatch criteria which had four grades of response. The first was a grade one response which included several criteria such as; a fall from a second floor or higher for an adult, sudden or witnessed cardiac arrest in a remote location, and road traffic collision where a person was thrown out of the vehicle by the crash. The grade one response only has to trigger any one of the listed criteria and the dispatcher will send an available crew.

The grade two response involved the dispatcher looking for two triggers which could be either the condition of the

patient, the location of the patient, or the method of sustaining the injury. If the patient was in a remote location this would trigger the location section. Then the dispatcher sent a crew if the patient had a condition or the way they were injured met one of their other triggers. These other triggers included conditions such as a head injury with persistent agitation or methods of injury such as serious electrocution.

The dispatchers also had a grade three response which was a request from the NHS critical care paramedics desk. The critical care paramedics desk staff looked at the details of the incident and might find more information that was not immediately apparent; this could mean the patient meet the criteria of a grade one or two response. These requests could be unusual situations that would benefit from the HEMS crew but did not fall into the normal criteria of grade one or two. If the request did not meet the grade one or two response criteria, the dispatcher discussed the case with the duty manager and a decision was made on an individual basis.

The grade four response was similar to the grade three response but the request for HEMS support was from an NHS crew on scene with the patient. The dispatcher followed the immediate dispatch policy for grade three and four responses. This meant that once triggered, they sent a crew. If after discussion with the duty manager, they decided the crew were not needed then the crew was stood down. This ensured that there was no delay for calls that needed the crew.

The service used innovative technology to help them assess the needs of patients and to decide if to dispatch their crews. The service introduced a newly developed technology that the dispatchers used with 999 callers. This allowed the dispatcher to send a code to the 999 caller's phone and this allowed the video camera on the caller's smartphone to stream a live feed to the dispatcher to allow them to see extra details about the scene such as the amount of damage to vehicles when assessing a response to road traffic collisions. This technology was also able to detect patients pulse and oxygen saturations of casualties which helped inform about the current condition of patients before the arrival of response crews.

The service worked closely with their local partners to offer the best possible service to people. The HEMS dispatcher was located with the NHS critical care



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paramedics desk so that they could flag concerns with each other about calls they were listening to. The NHS ambulance trust was informed of the availability of crews. The HEMS dispatcher 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 and NHS crews were able to request assistance from the air ambulance in special circumstances or for issues that had not been flagged before the arrival of the NHS crew.

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 the air ambulance's duty manager. We saw there was a good working relationship between the HEMS desk and 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 only committed an aircraft for inter-hospital transfers if there was a time-critical need for the patient.

Staff acted to minimise the time people had to wait for treatment. The service had worked to improve their aircraft availability to be able to respond quickly. They had purchased an additional aircraft to allow them to have two available to respond to calls and rotate the third helicopter in for maintenance. We looked at records that showed the service had 98% availability of response by air during the day over the past 12 months and 85% availability to respond by air at night. This remaining time when they could not respond by air was due mostly to weather conditions and the only other times they could not respond was when the pilots were doing their daily safety checks. The service also had three response vehicles at the base to allow them to respond by road if the helicopter was not able to take them. They had two crews so they each had their own road response vehicle and there was a backup response vehicle that they shared so that if one of the vehicles had a problem the crew immediately had a back up vehicle to take.

Learning from complaints and concerns

It was easy for people to give feedback and raise concerns about care received. There were active reviews of complaints and how they were managed

and responded to, and improvements were made as a result across the services. The service treated concerns and complaints seriously, investigated them and shared lessons learned with all staff, including those in partner organisations.

The service had a process for handling complaints and concerns. Patients were able to make complaints in writing, electronically or verbally. The service had a policy for the management of complaints which was up-to-date and had a review date. Staff we spoke to knew about the details of this policy and knew how to advise patients if they wanted to make a complaint.

The service thoroughly investigated complaints and responded to these swiftly. The executive director of service delivery or their nominated deputy handled the complaint which included contacting the complainant and agreeing a timescale and plan for resolution. The service committed to sending a formal acknowledgment of receiving the complaint within three working days and 25 working days to resolve the complaint. We looked at three complaints records and all these had been responded to and resolved in line with this policy.

The service viewed a complaint as an opportunity to learn and improve. Managers told us most of their complaints related to aviation issues. These were mostly related to the noise of the aircraft or related to landing on the complainant's land. We looked at one of these complaints and the service had responded with an explanation of why the crew had used their land and about the risk assessment carried out by the pilots before landing. They also noted that they were planning to get a system to be able to communicate clearly with the ground to alert people nearby that the aircraft was going to land.

The service involved partner services to investigate and resolve complaints. We saw they had received a complaint from the local ambulance service about the way crew had communicated with their staff while on scene. The air ambulance crew had only communicated with the senior member of staff on scene which resulted in the rest of the NHS ambulance staff feeling ignored. A manager from the air ambulance wrote an apology to the NHS staff and the crew performed a reflection on the incident and how they could improve communication in the future.



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Managers shared feedback from complaints with staff and learning was used to improve the service. Staff told us any complaints about their practice were discussed with them in a constructive way. We saw that a complaint from a crew from the local NHS ambulance service about an incorrect triage decision by the air ambulance crew. The service had followed up with the patient and established that there was no harm as a result of this incident. One of the consultants from the air ambulance conducted a peer review of the incident and identified the route cause as human factors which was also agreed by the crew on scene. Learning from this event was shared across the service and they used details from this incident in simulation training for crews.

Are emergency and urgent care services well-led?

Outstanding



We have not previously rated this service. We rated it as **outstanding**.

Leadership

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

There was a chief executive officer that led a well-structured senior management team. This senior management team had an executive director of service delivery, medical director, associate medical director, director of research and innovation, and three directors related to the finances and charity work of the service. There was six clinical governance leads that reported to the medical director. Two assistant directors, three managers and a chief pilot reported to the executive director of service delivery.

Leaders were visible and approachable. All staff we spoke to spoke of how they could always go to their managers or the senior management team to discuss concerns or

talk about improvement projects. There had recently been a new chief executive officer. All staff we spoke to reported that they had been very visible, approachable and that they had spent time with people in all roles across the service.

Leaders had the skills, knowledge, experience they needed. The new chief executive had a long history in leading charitable services across the world. The executive director of service delivery had worked for many years as a paramedic for the air ambulance service. The medical director had worked in many roles as part of their experience as an armed forces doctor and then in several air ambulance roles before this current role. The service delivery senior management still regularly worked as an extra crew member acting as part of the clinical supervision. This kept their skills and knowledge up-to-date with the issues faced by crews and patients at the scene of incidents.

Staff had the opportunity to discuss training needs with their line manager and were supported to develop their skills and knowledge. The service also supported staff that wanted to move towards a management role. The service ran internal secondments to support these staff learn by shadowing managers or working with supervision as a manager.

The service valued their dispatchers and ensured that being based remotely did not exclude them from the team. Dispatchers attended governance days which allowed them to have face-to-face interaction with their team and management. Managers told us they also once a week visited the dispatchers at the emergency control where they were based.

Vision and strategy

The service had a vision for what it wanted to achieve and a strategy to turn it into action, developed with all relevant stakeholders. The strategy and supporting objectives were stretching, challenging and innovative while remaining achievable. These were aligned to local plans within the wider health economy. Leaders and staff understood and knew how to apply them and monitor progress.

The service had a mission statement and vision. Their mission statement was to; save lives and improve



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outcomes by bringing the best pre-hospital care to critical patients wherever they are, whenever they need it. Staff knew this statement and we saw staff and managers were committed to training to achieve this. They were dedicated to continuous improvement to continue to achieve this into the future.

The services current vision said; we envision a society where no one dies following a sudden, unexpected trauma or medical emergency. All staff knew this vision and believed this was a good aspirational goal but felt it was not achievable. Managers had acknowledged their staff's concerns about the vision and were creating a new vision. All staff we spoke to told us they had been to focus groups to discuss the creation of a new vision and felt that management were listening to their feedback about the issues around the current vision and taking onboard their ideas for the new vision statement.

Managers told us they had involved their stakeholders and patient groups for input into their creation of a new vision. Managers told us they valued the input from all groups into their vision and understood that a shared method for creation of this was vital to the success of the vision being implemented and achieved.

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 these values. Their value 'caring' stated they would 'provide the best possible care to everyone who needs us' and 'we are about more than saving lives – we are about giving everyone we treat the best possible chance of leading a full life'.

There was a robust and realistic strategy for achieving the priorities and delivering good quality care. We looked at their strategy for the year 2019 to the year 2022 and the associated objectives. These were clearly laid out into six areas of focus with well-defined objectives and measurable outcomes. These six areas were; service and operation, research and innovation, fundraising and income generation, people and human resources, brand communication and influencing, and support capabilities.

The strategy was regularly monitored, and progress reviewed against the objective. We saw discussion of the

strategy and objectives in minutes for the clinical governance and service delivery committee and minutes for the risk management, clinical governance and innovation meeting.

Culture

There was a strong culture that was centred on the needs of patients. Managers across the service promoted a positive culture that supported and valued staff, creating a sense of common purpose based on shared values to deliver high quality person-centred care. The service provided opportunities for career development and staff could raise concerns without fear. Staff were proud of the organisation as a place to work and spoke highly of the culture.

All staff were committed and passionate about providing high quality care to their patients. They felt very proud to work for the service and were positive about the job they did. Non-clinical staff understood how their roles positively affected patient care. The latest staff survey showed that 61% of staff "always" look forward to going to work with another 25% saying they "often" do and no one saying they "never" look forward to going to work.

There was a culture of collective responsibility between all staff and managers. All staff we spoke with told us they felt part of a team and felt they worked well together and supported each other. They also reported that managers were always willing to listen to them and provide extra support when needed. The latest staff survey showed that 92% of staff were either "always" or "often" enthusiastic about their job. All staff we spoke with had an overwhelming commitment to providing the best possible care.

The leaders of the service felt proud of how cohesive their team was. They told us about the way that their staff, patients, relatives, volunteers and trustees worked together to support the service and continuous improvement. The leaders supported junior staff to develop and viewed this as a positive step towards ensuring the service has the staff with the skills needed to deliver the service in the future.



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All staff we asked felt confident in reporting any incidents and they would report incidents using the electronic reporting tool. Staff told us they had reported these, and managers had supported them.

Openness and honesty were encouraged at all levels of the service and staff felt able to report incidents and raise concerns. Staff we spoke with had not been involved in incidents that would have led to responsibilities to implement duty of candour but had an awareness of the policy and knew how it should be applied. Duty of candour requires providers of health and social care services to notify patients (or other relevant persons) of 'certain notifiable safety incidents' and provide reasonable support to that person. Policies stated patients and their families would be told when they were affected by an event where something unexpected or unintentional had happened.

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 was a peer-developed psychological support system designed to allow 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.

Governance

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

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: fundraising and communications; clinical governance and service delivery; audit and risk; and promotions. The risk management, clinical governance and innovation group communicated information between the four committees to three key groups; the senior management

team, the finance team and the senior clinical leadership team. The senior management team was responsible for communicating for three further groups such as the service delivery group and the operations risk management group.

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

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

Records were effectively used to steer learning. The electronic system automatically flagged jobs that staff could use or review at governance days. They were flagged because they had key areas the team would benefit from reviewing, for example, cardiac arrests. The duty manager could also flag jobs that were not automatically flagged by the system. Records used for learning at governance days were anonymised to protect patient confidentiality.

Staff met to discuss the feedback and look at improvements to patient care. Staff discussed all incidents at their governance day. All staff at the service had a governance day every seventh shift. These days involve discussion of all incidents that had occurred since the last governance day and updates on any unresolved incidents from the previous meeting. These days also consisted of simulation training that when a hot topic or an incident occurred would be focused on the learning that had arisen from these. Staff told us these days were very valuable to learning about how to improve from incidents. The service also used information about incidents that had occurred at other organisations to inform these training simulations.

Management of risks, issues and performance



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Leaders and teams used systems to manage performance effectively. They identified and escalated relevant risks and issues and identified actions to reduce their impact. They had plans to cope with unexpected events.

There were comprehensive systems to monitor performance. The service did not have key performance indicators. However, they had set five objectives in collaboration with their stakeholders to measure their performance. We looked at records that showed the service monitored and pursued progress against these objectives.

The service submitted quarterly reports to their local stakeholders about their performance against their objectives. We looked at these and saw they included the history of the past years performance and plans of what the service was doing to improve.

The service had detailed business continuity plans and major incident plans. Staff knew where to find these policies and knew their role in each of these plans. There were action cards that reminded staff what their role was in a major incident and all staff we asked told us where their card was stored. Managers told us they had reviewed their business continuity plans following an incident involving another service which had severely impacted their service. This had highlighted to managers of this service the need to consider what the service would do if they had a loss of all their equipment at their base at Redhill. They decided to keep a response car at their charity headquarters so that they would still be able to offer a land-based service.

The service monitored their risks and acted to mitigate these. We looked at their risk register that was up-to-date and all risks had a review date scheduled. Risks were scored on the level consequence and the likelihood of them happening. These scores were reviewed, and we saw that they were adjusted up or down depending on updated information about the risk. This meant that there was effective oversight to the changing impact of their risks.

Risk recorded included; the loss of vital assets including the discussion above about the loss of their helicopter base, recruitment lead times being longer than notice periods, and mental well being of operational staff

because of the nature of work they were exposed too. All these risks had detailed lists of actions taken related to them which included the introduction of trauma risk management (TRiM) to support crew's mental wellbeing.

The service held a quarterly risk management, clinical governance and innovation meeting. We looked at minutes from this meeting that showed the service discussed its current risks and added new risks to their register. Staff we spoke with knew what the risks were to the service and these were echoed in the risk register.

Information management

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

The service used a holistic approach to integrate their information management processes. The service had a digital audit system that tracked all their audit information which included information about cleaning schedules, incidents, safeguarding reports, and temperature logs. This system was used to monitor as well as look for areas to improve.

The service collected, analysed, managed and used information well to support all its activities. The service had developed their own evidence-based patient record tool. This showed staff the information they needed most quickly and was easily shared with hospital teams for the safe and efficient handover of care.

The service had secure electronic systems with security safeguards including individual usernames and passwords for each member of staff. The physical security of the base was secure, only people with access cards could access the building and all visitors' identities were carefully confirmed before allowing the entry. Data was stored on secure cloud servers. This cloud storage service had produced a document that showed how they met national standards for storage of patient information.

Staff had training on how to keep information secure. We looked at records that showed all staff were given information governance training and compliance with this training was 92%.



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When required the service shared information with external organisations. The service shared information about incident reports that involved other organisations. We saw that the service had shared information about an incident report that involved the local NHS ambulances service's staff as well as the air ambulance staff. Managers told us this was a common approach they took to investigate these types of incidents and to share any learning identified by either services investigation.

There were effective systems to share information to promote improvements in healthcare. The service had shared the standard operating procedure for the delivery of blood products in the pre-hospital setting. This included the German, Polish, Swiss, and Hungarian air ambulance services. The service had been awarded a commendation for 100% traceability of blood products for three years; 2017, 2018 and 2019. The service had also visited the German air ambulance service to give their support in setting up their pre-hospital blood transfusion program.

Public and staff engagement

Leaders and staff used innovative approaches to gather feedback from people who use services and the public. This was then used to plan and manage services. They collaborated with local, national, international partner organisations to help improve services for patients. There were consistently high levels of constructive engagement with staff.

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 had worked with local NHS trusts to allow the trusts to give patients a feedback form about the air ambulance service at the time of their discharge from hospital. Managers and staff told us they had found giving patients feedback forms at handover to the hospital team impractical due to the nature of most of their patient's conditions at that time.

The service effectively involved over 200 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 provided. Community events were organised, including holding a Christmas carol service at a local cathedral. This event included patients being offered the opportunity to speak about their experiences with the service.

Staff told us leaders operated an open-door policy and they could discuss concerns. Staff told us they felt comfortable to talk to anyone in the management team about any issues. Responses we saw from the service staff survey said that communication from management was good. In response to how the senior management team listened and communicated the survey results showed 61% of staff were satisfied, 20% were neither dissatisfied or satisfied, and 19% were dissatisfied. Managers told us this survey was done in a time of change and they had made changes based on this feedback so were hopeful that when repeated these scores will have improved. All staff we spoke to felt that management involved them.

The service effectively involved members of the public. The service website provided a large variety of information for the public including; patient stories, material about their team, and about the service's history. They also took part in television programs that showed the wider public examples of critical lifesaving treatments provided by the air ambulance crews.

The service effectively engaged with their local partners. The service held quarterly meetings with the local NHS ambulance service that they worked alongside. Feedback from this NHS trust was very positive about the way the service had engaged with them and the way the service looked for improvement.

The service effectively engaged with their national partners. We looked at records showing that the staff went to national air ambulance conferences to present research posters and share ideas with others.

The service effectively engaged with their international partners. The service had a yearly visit to another air ambulance service in another country to have a shared approach to learning across the globe. We saw records showing that they had recently taken their staff to visit the Danish air ambulance service. They also had plans to host a meeting of the European Helicopter Emergency



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Medical Service and Pre-hospital Research Alliance at the end of March 2020. The service's professor also had visited a Scandinavian university to contribute to their pre-hospital course.

Managers engaged with their staff and acted based on their feedback. The service completed a staff survey yearly. This was largely positive, but they picked up that staff were not as positive about the setting they worked in. They reported not having a suitable area to rest to prevent fatigue during night shifts. Managers responded and had a rest room built which included individual sleep pods with beds and was in a quiet area of the base. Staff also noted that the gym that had been talked about was never built. Managers responded by finishing this project and we saw that a gym with equipment had been installed. Staff told us they liked that their managers responded to their feedback and found the gym and rest room useful.

Innovation, improvement and sustainability

All staff were committed to continually learning and improving services. The leadership drove continuous improvement and staff were accountable for delivering change. Safe innovation was celebrated. There was a clear proactive approach to seeking out and embedding new and more sustainable models of care. Leaders encouraged innovation and participation in research.

We saw examples of commitment to care and no examples where financial matters compromised care. For example, the service only used disposable items until the start of the month that they went out of date and for training they only used items that were in date. The service 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 encouraged. The service supported staff to take part in research. We looked at five of 27 published research papers authored by Kent, Surrey and Sussex Air Ambulance staff.

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, staff were enthusiastic about

their project working with a London hospital trust to bring patients from across the county for extra-corporeal membrane oxygenation. Extra-corporeal membrane oxygenation is a life support machine that replaces the gas exchange that would normally occur in the lungs, this is different to a normal life support machine as they would only carry out the action of breathing with the gas exchange still occurring in the patient's lungs.

The service effectively engaged with their partners working in space. The service had been working with the European Space Agency on a project to provide live transmission of vital observations. This project was currently being used by the air ambulance service to remotely monitor their patients and receive remote support from consultants. The space agency wants to after trials were completed potential use this technology on the international space station to support the healthcare of the astronauts.

Leaders and staff were focused and committed to continuous learning, and improvement and innovation. The service had worked with custom fabricators to create the first high detail air ambulance cabin simulator. This was used for training but also for testing new ways of working and conducting the research needed to implement these new methods safely for patients.

The service were leaders in their field in a number of areas. Staff we spoke with were proud to tell us at the time of inspection the service was the only 24 hour a day helicopter response helicopter emergency medical service (HEMS) in the country. This meant staff could respond to patients by helicopter during diminished light where as other services either did not cover 24 hours a day or responded by road vehicle at night. The service responded to 85% of calls by helicopter during night time hours. The service was also involved in the development of new methods of providing care to patients while on scene. Crews told us about completing in the back of the aircraft the procedure to deliver a general anaesthetic. Currently this was only done while the helicopter was on the ground, but the service was working on research to allow them to safely undertake this during flight.

Staff were focused on continually improving the quality of care and this was recognised and rewarded. Staff regularly attended conferences and had won awards



Emergency and urgent care

including best research poster at the London Trauma Conference, the Faculty of Pre-Hospital Care conference, and Retrieval the UK's Pre-hospital and Critical Care Transfer conference.

The service conducted innovation and improvement work though all areas of their service. All staff and managers we spoke to were fully committed to providing

the best possible care and they all knew that this involved continuous improvement. The service had completed so much work in this area it was not possible to capture all of that detail in this section of this report so we have displayed some examples of the themes covered by this service but there were many other examples throughout the other sections of this report.

Outstanding practice and areas for improvement

Outstanding practice

We found many aspects of outstanding practice in this service and these were detailed in the main body of this report. The following are some examples of the outstanding practice;

- The service had an open culture to reporting all types of incidents. They had a dedicated section of each governance day to looking at incidents reported. They used these reports to inform scenario simulation-based training. All staff took part in these governance days and allowed them to be involved with the investigation of all incidents even those not directly related to their own role.
- The service had conducted research on new methods of treatment including new in aircraft procedure and were continuing to increase the limits of what treatments were safe and possible.

- The service engaged with its partners with the aim of improving care to all patients. This included working with; local NHS trusts training their staff, the Ministry of Defence improving services to the UK armed forces, air ambulance services across the globe sharing learning in both directions, and with the European Space Agency on research projects to improve care to astronauts on the international space station.
- The service had strong leadership that supported their staff and created a culture supporting a thoroughly patient focused team.

There were many more examples of outstanding practice not included in this report. We did not include every example as the evidence included supported our rating.