

East Midlands Ambulance Service NHS Trust East Midlands Ambulance Service NHS Trust

Quality Report

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Date of inspection visit: 21, 22, 23 February 2017 and 03 March 2017 Date of publication: 13/06/2017

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

Ratings

Overall rating for this ambulance location

| Emergency and urgent care services | Requires improvement |
|--|----------------------|
| Emergency operations centre | Requires improvement |
| Are acute services at this trust safe? | Requires improvement |
| Are acute services at this trust effective? | Requires improvement |
| Are acute services at this trust caring? | |
| Are acute services at this trust responsive? | |
| Are acute services at this trust well-led? | Requires improvement |

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Letter from the Chief Inspector of Hospitals

East Midlands Ambulance Service NHS Trust (EMAS) covers the six counties of Derbyshire, Nottinghamshire, Leicestershire, Rutland, Lincolnshire and Northamptonshire. This is an area which has a population of around 4.8 million people and covers approximately 6,425 miles. The trust employs 3,290 staff over 60 locations.

We carried out a follow up inspection of the East Midlands Ambulance Service NHS Trust from 21 to 23 February and 3 March 2017, in response to a previous inspection as part of our comprehensive inspection programme of East Midlands Ambulance Service NHS Trust in November 2015. In July 2016 we served the trust with a Warning Notice in which we required them to make significant improvements to the quality of health care provided. This was specifically in relation to ensuring there were sufficient staff with the right skill mix and sufficient vehicles as well as requiring the trust to ensure staff received appropriate training, support and appraisal to carry out their roles.

Focused inspections do not look across a whole service; they focus on the areas defined by the information that triggers the need for the focused inspection. As the trust were no longer commissioned to provide patient transport services in Lincolnshire we did not look at that core service.

During this inspection we looked at:

The safety and effectiveness of Emergency and Urgent Care Services.

The safety and effectiveness of the Emergency Operations Centres.

Safety, effectiveness and well led at provider level.

The overall rating for East Midlands Ambulance Service remains unchanged at requires improvement although safety for emergency and urgent care services is no longer inadequate but requires improvement.

Our key findings were as follows:

• The trust had made significant improvements as required by the July 2016 warning notice. However we remained concerned about response times.

- Response times for Red 1, Red 2 and A 19 calls were consistently below the national target and patients were not receiving care in a timely manner.
- There were variable standards of incident investigation, limited recommendations, lack of learning at an organisational level and a lack of evidence that recommendations had been actioned.
- There was a lack of consistency in the management of risk due to trialling a revised risk register proforma.
- Staff did not know about the Duty of Candour requirements or their responsibilities under it and the trust had not consistently fulfilled their responsibilities under the Regulation.
- We found pockets of concern about the potential bullying and harassment of staff who were not confident to report this. We found instances where policies and procedures relating to staff wellbeing were not followed in practice.
- Not all staff had been trained on the use of and supplied with filtered face piece masks (FFP3). Those that had been supplied with a mask did not always have them available for immediate use.
- The trust were not compliant with the requirements of the Fit and Proper Persons Regulation.
- Whilst the trust had a clear vision and strategy, frontline staff were not aware of these.
- Whilst training completion rates for statutory and mandatory training had significantly improved, mandatory training completion rates for equality and diversity and risk management modules were too low and there were challenges in two specific divisions around completion rates in general.
- The trust had taken appropriate actions which had been successful in increasing the number of front line staff.
- Standards of cleanliness had improved.
- The majority of equipment and vehicle checks were appropriately completed.
- There was an increased number of operational vehicles available to deliver emergency and urgent care services.

Summary of findings

- Medicines were stored securely and the management of controlled drugs was in line with the trust's policy. However, we had some concerns about the lack of robust audit trail for access to controlled drugs on solo responder vehicles.
- There were notable improvements in the security of patient records.
- Potential risks to the service were anticipated and planned for in advance.
- The trust had taken action to provide frontline staff with the knowledge and information they needed to respond to a major incident.
- People's care and treatment was planned and delivered in line with current evidence-based guidance, standards and best practice.
- Patient outcomes were mainly above or equivalent to national average levels.
- Staff had received timely appraisals which had been perceived by most to be a meaningful process.
- Improvements in training and development opportunities were evident and staff told us about them.
- Where patients received care form a range of different staff, teams or services this was effectively coordinated.
- Staff were confident in their understanding of the principles for patient consent and the Mental Capacity Act 2005 and they followed them.
- There was a governance framework able to support the delivery of safe, high quality care.
- There was a high level of confidence in and respect for the leadership of the acting chief executive.
- There was increased confidence in the effectiveness of the board and frontline leaders were better equipped with skills and knowledge.
- The culture of the trust from board to frontline staff was overwhelmingly patient focussed. Our inspection team observed caring, professional staff delivering compassionate, patient focussed care in circumstances that were challenging due to the continued demand placed on the service.
- Staff engagement and satisfaction had improved since our last inspection.

We saw several areas of outstanding practice including:

• The trust had run a highly effective recruitment campaign and received a national award for equality and diversity in recruitment.

- The trust were trialling a pre-hospital sepsis treatment in North and North East Lincolnshire. Where patients presented with the symptoms of sepsis, blood cultures were taken and a pre-hospital dose of intravenous antibiotic therapy administered to the patient. This saved valuable time and provided prompt lifesaving treatment. The results of the study had not been published at the time of our inspection but early indications showed positive outcomes for patients. The trust was the only ambulance trust in England providing pre-hospital care to this group of patients.
- The trust had extended the provision of a mental health triage car in Lincolnshire and also to include patients in Derbyshire increasing the provision of appropriate care and treatment for patients with mental health conditions.
- We observed caring, professional staff delivering compassionate, patient focussed care in circumstances that were challenging due to the continued demand placed on the service.

However, there were also areas of poor practice where the trust needs to make improvements.

Importantly, the trust must:

- The trust must ensure patients receive care and treatment in a safe way by meeting national and locally contracted response time targets for Red1, Red2 and A19 categorised calls.
- The trust must take steps to improve EOC call taking response times therefore reducing the number of calls abandoned and the length of time callers are waiting on the phone.
- The trust must ensure all staff know how to report incidents. The trust must ensure serious incidents are appropriately and consistently investigated with lessons learnt acted upon and shared widely.
- The trust must ensure all staff understand the Duty of Candour Regulation and their responsibilities under it.
- The trust must ensure all staff access and attend mandatory training with particular focus on compliance rates for equality and diversity and risk management training.
- The trust must ensure all staff are fitted for and trained in the use of a filtered face piece mask to protect them from air borne infections.
- The trust must increase the percentage of frequent callers who have a specific plan of care.

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Summary of findings

- The trust must ensure there are systems in place to ensure staff have received, read and understand information when there are updates to trust policies, procedures or clinical practice.
- The trust must ensure they comply with the Fit and Proper Persons Requirement (FPPR) (Regulation 5 of the Health and Social Care Act (Regulated Activities) Regulations 2014).

Professor Sir Mike Richards

Chief Inspector of Hospitals



East Midlands Ambulance Service NHS Trust

Detailed findings

Services we looked at Emergency and urgent care and Emergency operations centre (EOC).

Detailed findings

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Background to East Midlands Ambulance Service NHS Trust

East Midlands Ambulance Service NHS Trust (EMAS) covers the six counties of Derbyshire, Nottinghamshire, Leicestershire, Rutland, Lincolnshire and Northamptonshire. This is an area which has a population of around 4.8 million people and covers approximately 6,425 miles. The trust employs 3,290 staff over 60 locations.

The trust covers an ethnically diverse population with 85% white British residents. The largest represented ethnic minority is Asian. The region has the second lowest overall population density in England. There are high levels of deprivation in Lincolnshire, Northamptonshire and Nottinghamshire. Leicestershire and Nottinghamshire have areas of high population density whilst Derbyshire and Lincolnshire have large areas of rurality.

We carried out a follow up inspection of the East Midlands Ambulance Service NHS Trust from 21 to 23 February and 3 March 2017, in response to a previous inspection as part of our comprehensive inspection programme of East Midlands Ambulance Service NHS Trust in November 2015. In July 2016 we served the trust with a Warning Notice in which we required them to make significant improvements to the quality of health care provided. Focused inspections do not look across a whole service; they focus on the areas defined by the information that triggers the need for the focused inspection. During this inspection we looked at:

Emergency and Urgent Care Services – safe and effective

Emergency Operations Centres - safe and effective

Provider - well led.

As part of our inspection we visited trust premises including offices, training areas, ambulance stations and emergency operations centres. We also visited hospitals and other health care locations to speak with patients and staff about their experiences of the ambulance service

Our inspection team

Our inspection team was led by:

Chair: Gillian Hooper, Independent Consultant

Head of Hospital Inspections: Carolyn Jenkinson, Care Quality Commission

The team included CQC inspectors, inspection managers, a national professional advisor, a pharmacist inspector, an inspection planner and a variety of specialists:

Detailed findings

paramedics, senior paramedics, a consultant paramedic, a clinical general manager, operational managers, an emergency operation centre manager, a call handler, and a director of strategy.

How we carried out this inspection

To get to the heart of patients' experiences of care, we always ask the following five questions of every service and provider.

- Is it safe?
- Is it effective?
- Is it caring?
- Is it responsive to people's needs?
- Is it well led?

The inspection team inspected the following:

- Emergency and Urgent Care
- Emergency Operations Centres

Prior to the announced inspection, we reviewed a range of information that we held and asked other organisations to share what they knew about the trust. These included the 22 clinical commissioning groups (CCGs), NHS Improvement, and NHS England.

We held interviews with a range of staff in the service and spoke with staff individually as requested. We talked with staff from acute hospitals who used the service provided by the trust. We spoke with patients, carers and / or family members and reviewed patients' treatment and other records.

We carried out the announced inspection visit between 21 and 23 February 201 with an unannounced inspection on 3 March 2017.

Facts and data about East Midlands Ambulance Service NHS Trust

East Midlands Ambulance Service NHS Trust serves a population of 4.8 million people across an area of approximately 6,425 square miles covering the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland.

As of December 2016 the trust employed 3,0 staff across over 60 locations. The trust had around 550 vehicles, including emergency ambulances, fast response cars, specialised vehicles and patient transport vehicles. As of December 2016 the trust had two emergency operations centres, located in Lincoln and Nottingham, and 60 ambulance stations. Between December 2015 and November 2016 the trust received 939,499 emergency and urgent calls. Of these 659,480 calls resulted in an ambulance attending the scene of the incident.

In 2015/16 the trust reported a turnover of £154.1 million and a deficit of £12.2 million. For 2016/17 the trust predicts a turnover of £173.1 million and a deficit of £4.5 million.

Our ratings for this service

Our ratings for this service are:

Detailed findings



| Safe | Requires improvement | |
|------------|-----------------------------|--|
| Effective | Requires improvement | |
| Caring | Good | |
| Responsive | Good | |
| Well-led | Requires improvement | |
| Overall | Requires improvement | |

Information about the service

East Midlands Ambulance Service NHS Trust (EMAS) provides an urgent and emergency care service to a population of approximately 4.8 million across the East Midlands. This region covers the six counties of Nottinghamshire, Derbyshire, Lincolnshire (including North and North East Lincolnshire), Northamptonshire, Leicestershire and Rutland. The counties are split into five divisions. The service covers approximately 6,425 square miles, which incorporates urban, semi-urban and rural communities including remote and coastal areas. There are 22 clinical commissioning groups (CCGs) across the region, with one CCG acting as coordinating commissioner with EMAS for services. On average, the trust receives 2000 calls per day.

The trust headquarters are located in Nottinghamshire; there are two emergency operation centres, one in Lincolnshire and the other in Nottinghamshire. Across the five divisions, there are over 60 ambulance stations. The trust has its own fleet centres responsible for maintaining the trust vehicles.

EMAS provides paramedic services for the local charity funded air ambulance based in Lincolnshire and co-ordinates and supports the work of voluntary community and emergency first responders in their delivery of care including lifesaving interventions prior to the arrival of ambulance staff. The trust employs over 3290 staff, has around 550 vehicles including vehicles equipped to provide a fast response (FRV) and vehicles designed to deliver services in more remote areas and therefore have some off road capability.

We previously carried out a comprehensive inspection of the trust in November 2015 and published the report in May 2016. In 2015, the safety of services was rated as inadequate and effectiveness of services was rated as requires improvement.

Following the previous inspection, a warning notice was issued under the Health and Social Care Act 2008 requiring significant improvements to be made by the end of November 2016. Fourteen requirement notices were issued under the Health and Social Care Act Regulated Activities Regulations 2014. The warning notice and nine of the requirement notices were applicable to either the safety or effectiveness of urgent and emergency care services.

This inspection was carried out from 21st to the 23rd February 2017 and an unannounced inspection on 3 March 2017, followed up these notices and therefore focused on the safe and effective key lines of enquiry.

During our follow up inspection, we visited 30 ambulance stations across all five divisions including some where we had previously identified a concern. We visited nine hospital emergency departments to observe patients over the arrival and handover of care to the hospital staff. We observed ambulance staff caring for patients and accompanied staff on 13 emergency calls. We spoke with 186 members of urgent and emergency care staff, including general managers, paramedics, emergency care assistants,

technicians and administration and support staff. We also spoke with 11 patients and four relatives about the care they had received. We inspected 60 ambulance vehicles and reviewed 70 patient records.

The Hazardous Area Response Team (HART) and the air ambulance base in Lincolnshire were not visited as part of this follow up inspection as there had been no particular concerns raised on the previous inspection that were unique to these services.

Summary of findings

- Although the trust continued to focus on initiatives to improve their response times they remained consistently and significantly below the national targets throughout 2016 for Red1, Red 2 and A19 calls, which was our finding at our previous inspection.
- There had been insufficient improvement in the management of incidents and systems were not in place to provide assurance that any learning led to improvements.
- Insufficient numbers of staff had completed their statutory and mandatory training in some key subject areas, including equality and diversity and risk management.
- Staff were not aware of the legal requirement of the duty of candour and completion rates on the training on this subject reflected that it had not been seen as a priority by the trust.
- The importance of protecting staff from potential infections had not been given sufficient priority as not all front line staff had not been provided with the required face masks. We raised this concern at our last inspection.
- When trust policies and procedures were updated there were no systems in place to ensure staff had received, read or understood any of the updates published by the trust.
- Staff training needs highlighted at the previous inspection were slow to be addressed leaving a significant number of staff without training on caring for patients with mental health illnesses.

However:

- There had been an improvement in the management of medicines including controlled drugs, which were now managed in compliance with the trust's medicines policy.
- Systems were in place to ensure the security of patient personal information and staff were observed complying with these requirements.

- There had been a marked improvement on the completion rates of staff appraisals. Staff felt the process was of value when it was delivered by their clinical team mentors who accompanied them during a shift.
- There were good examples of partnership working across all divisions and with staff from a wide range of professions. There was evidence where services had improved as a direct result of collaborative working.
- Patient outcomes were consistently monitored and this enabled improvements in care delivery to be made. The trust had performed well in delivering first line care to patient's suffering heart attack

Are emergency and urgent care services safe?

Requires improvement

We rated safe as requires improvement because:

- Incidents were not always reported and some that were reported were not investigated promptly. Methods used to share learning did not assure changes were made to improve practice to prevent future incidents. The quality and detail of the feedback provided to staff when they reported was not always sufficient. We raised these concerns at our last inspection.
- Despite the legal requirement of the duty of candour being implemented in April 2015, a significant number of staff had not received training and remained unaware of this legal principle. Staff were however open and honest in the way they delivered patient care.
- Mandatory training had not been delivered to all staff in emergency and urgent care. Compliance rates for equality and diversity and risk management training were particularly low. The trust target for training was 95% in most mandatory subjects.
- There were still some areas of infection prevention and control that required improvement. Clinical waste management had improved but clinical waste was not always managed in line with legislation and guidance. Not all staff had been trained on the use of and supplied with filtered face piece masks. Those that had been supplied with a mask did not always have them available for immediate use. We raised concerns about the provision and fitting of these masks at our last inspection.
- A proportion of medical sterile supplies had passed the dates on which they should be used and some equipment was outside its scheduled service date. However, the trust took prompt action to address these points and we saw an improvement during our unannounced inspection. Equipment was not always checked in line with the manufacturer's guidance.

However:

• The trust had increased the number of operational vehicles they had available to deliver urgent and

emergency care services when compared to the number they had available on during the previous inspection in 2015. The majority of the time safer vehicle checks were completed and recorded by the crews.

- The trust had taken actions since our last inspection to ensure front line staff and particularly those with operational responsibility in the management of a major incident had access to the appropriate training.
- The training of staff was given a higher priority, mandatory and statutory training was not cancelled and staff reported the quality of the training had improved. Career progression opportunities had been recognised as important in recruiting and retaining staff and training courses provided greater progression opportunities.
- Medicines were stored securely and the management of controlled drugs was in line with trust's policy, however we still had some concerns about the traceability of controlled drugs due to the access arrangements on vehicles.
- The management of confidential information on trust vehicles ensured it was kept safe. Storage of patient records had improved and the trust took prompt actions to address any concerns that were raised.
- The management of trust vehicles had improved, vehicles appeared visibly cleaner and staff reported there had been improvements in the reliability and quality of the vehicle deep clean process.

Incidents

- Following our previous inspection in 2015, a notice was issued to the trust which required them to ensure they had systems to assess monitor and mitigate risks ensuring incidents were reported and investigated. The trust was also asked to consider how feedback was supplied to individual members of staff in a timely manner and how lessons learnt from incidents could be shared across the trust.
- On this inspection, we found there had been a delay in the investigation of some incidents. Individual feedback was not always given to staff who reported incidents. Where learning from incidents had been identified this was not shared in a way that assured actions would be taken to make improvements. There was very limited evidence of learning from incidents across divisions.
- Between January and December 2016 there had been no never events reported by the trust. Never events are serious patient safety incidents that should not happen

if healthcare providers follow national guidance on how to prevent them. Each never event type has the potential to cause serious patient harm or death but neither need have happened for an incident to be a never event.

- In accordance with the serious incident reporting framework 2015 the emergency and urgent care service reported 40 serious incidents, (SIs) from January to December 2016. These met the reporting criteria set by NHS England. Of these the most common incident type was treatment delay which accounted for 21 (52%) of the reported incidents. Sub optimal care of the deteriorating patient accounted for four (10%) of the incidents.
- On this inspection, we spoke with 81 front line staff about incidents. All the staff were confident in the incident reporting process, how this was accessed on line or via an incident reporting telephone line. Two non-clinical staff had not been shown the incident reporting procedure. These members of staff were working within trust premises. Clinical staff were all able to provide examples of what they had or would report as in incident. Staff explained they sought the advice of their team leader if they were unsure on whether something should be reported.
- Crews explained that they had insufficient time between calls to report incidents and they often had to file incident reports in their break or after their shift had finished.
- From June to December 2016 there were 1789 incidents reported by urgent and emergency care staff via the trust's internal reporting system. Common incidents related to violence, assault and aggression against staff, which accounted for 341 (19%) of the incidents reported and incidents which related to manual handling accounted for 129 (7.2%) of those reported.
- There were varying views amongst staff on the feedback received after an incident was reported. Team leaders explained an acknowledgement was sent to the reporter via email. Staff reported receiving an acknowledgement from the on line reporting system but personal feedback was not recalled by the majority of staff we asked. Eight staff across two divisions stated they would not always report incidents due to the lack of feedback they had received in the past.
- Staff were aware that updates from safety alerts and changes to clinical practice were forwarded to staff in clinical bulletins. Staff spoke of how these were colour

coded, red ones highlighting the most significant information. There were updates displayed at all the stations we visited, however staff had very little knowledge of the content of what was displayed on the noticeboards. We saw alerts displayed from the medicines healthcare regulatory agency.

- Team leaders confirmed there was no trust procedure for recording if staff had received, read and understood the clinical updates or changes to policy that were sent to staff via email or those displayed at stations.
- In 2016, there had been a serious incident where a patient had absconded whilst in EMAS care. Following an investigation, an action plan was compiled to ensure the learning identified would be shared. Actions included an anonymised report in the staff on line newsletter and for an absconder policy to be produced. We asked 27 staff across all divisions if they either knew of the incident or the policy. Six staff, four of who were team leaders or more senior, knew there had been an incident or knew of the policy. Twenty one staff did not know about the incident or the absconder policy. In one station we saw information about the incident displayed.
- Some stations had divisional information about the incident themes displayed. Some staff did know about incidents within their division but this had been via their colleagues. There was very little evidence of learning across the trust.
- Managers in one division explained an assurance group had been developed to look at investigations and the actions that had been taken. Also, a learning group had been established to ensure learning was shared and meetings were held for all RCAs and staff were invited to attend where appropriate. Team leaders told us they would share learning at their team leader meetings
- A clinical team mentor (CTM) gave an example where learning from an incident had led to additional local training and a course tutor explained mandatory and statutory updates incorporated themes identified from incidents. The example given was of manual handling incidents.
- The trust had support systems in place for staff who had been directly involved in an incident. These included a peer to peer support programme. We had mixed and limited evidence of how effective the support process was to staff. One member of staff explained they had not received any support following an incident that took

place in the New Year. A clinical team mentor explained how they had provided support for a member of staff involved in a serious incident. This had involved working with the member of staff to improve their confidence.

- The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of certain 'notifiable safety incidents' and provide reasonable support to that person. The duty of candour became law in April 2015.
- Following the previous inspection the trust were informed they should consider how to ensure all staff understood duty of candour and their responsibilities under it.
- We asked 48 staff about their understanding of the duty of candour. The term, duty of candour appeared unfamiliar to 31 of the staff we spoke with. Team leaders had more familiarity with the term than crews and were aware of the need to escalate a concern to more senior managers. A CTM explained how the principle had been applied recently in relation to a medication.
- All staff we spoke with discussed the principle of being open and honest with patients. There was little knowledge of the trust's on line duty of candour training package which had been introduced in July 2016. Data supplied by the trust reported 131 (5.9%) front line staff had completed the on line training during the seven months the training had been available. We asked one team leader about staff who had completed the on line training but they had no knowledge of which of their staff, if any, had accessed the training.
- In January 2017, a bulletin was sent to all staff, which stated a leaflet would be available for them on the duty of candour. During the inspection, staff in Lincolnshire explained this had not yet become available. We saw posters displayed at some stations explaining the duty of candour principle.

Mandatory training

- Following our previous inspection in 2015, a warning notice was issued to the trust which required them to deliver appropriate training to staff to enable them to carry out their duties. Mandatory training had not been delivered to all urgent and emergency care staff.
- From data supplied by the trust and from speaking with staff in all divisions actions had been taken by the trust

to address this requirement notice. However, the completion rates for some of the mandatory and statutory training were below the trust target and not on track to achieve it by the end of March 2017.

- In the urgent and emergency care service as of the end of October 2016, eight of the 11 course modules making up the trust's statutory and mandatory training had achieved compliance for the majority of the divisions.
- However, there was a failure to meet required training levels for equality and diversity and risk management training across all divisions. Leicestershire division had particularly low compliance rates for annual resuscitation training, annual manual handling training, annual infection prevention control and information governance training. Northamptonshire division had particularly low compliance rates for annual resuscitation training and annual infection prevention control training.
- The trust had incorporated a new mental health training programme as part of the statutory and mandatory training. This had begun in September 2016 with an initial completion target of 20%. This had already been exceeded by the end of October 2016 when 28.8% of staff had completed this training. There was a two year role out programme for this training.
- Staff we spoke with had all either completed or were booked to complete their mandatory training. An overwhelming majority of staff reported the quality of the training had improved over the last 12 months. No members of staff reported any mandatory training had been cancelled and staff who did not attend their booked session had been followed up for their non-attendance.
- We reviewed the course agenda and lesson plans of a mandatory training day course, the subjects covered were infection prevention and control, information governance, resuscitation and moving and handling theory and adult and paediatric resuscitation practical and assessment. Course content made reference to current trust policy and procedure.
- Staff who drove under emergency conditions completed specific training to ensure they were able to safely perform this role. Additional training was provided if any concerns were raised about the driver's performance or they had been involved in a road traffic collision.

- The trust's safeguarding policies for adults and children provided information and guidance to front line staff on how to recognise and respond in situations where they suspected a person may be at risk of harm or abuse. The trust provided mandatory adult and children safeguarding training every three years for all front line staff and data supplied by the trust showed 94.5% of staff had completed this training as of October 2016.
- Trust policies were available on the intranet and we saw a copy of the trust's current safeguarding policy on a station in Nottinghamshire.
- Staff we spoke with understood their safeguarding responsibilities and were able to discuss examples of when they had or would make a safeguarding referral. These examples included when a family member appeared to be neglecting an elderly relative, when a child had bruising that was not able to be explained and not expected and when a crew had concerns about a patient had been a victim of female genital mutilation (FGM). FGM is defined as the partial or total removal of the female external genitalia for non-medical reasons.
- All staff knew the trust's procedure for raising a safeguarding concern and explained they telephoned the designated internal safeguarding referral line. There were a number of staff who raised concern the safeguarding referral line was not always available and a message facility was provided for them to leave a message asking the referral desk to re contact them.
- A manger and clinical team mentor (CTM) confirmed the referral line was not always available and this led to staff informing their immediate manager of safeguarding concerns that still required referral at the end of their shift where the crew had not received a call back. One CTM we spoke with had five referrals to follow up and although these had been assessed as non-urgent concerns there had been a delay in the information being relayed to the trust's safeguarding team.
- When the safeguarding referral line was not available and there was an immediate concern that could not be left the crews contacted the clinical advice team desk where a member of staff would take details of the urgent concern.
- Staff were concerned that leaving a message regarding a safeguarding concern delayed the referral process, left them recalling information when they had already moved onto another job or even after they had returned to work the following day. Retaining sufficient information to make a comprehensive referral at a later

Safeguarding

date was difficult as the patient's report form would have been transferred to secure storage and retaining other written records was a potential for personal information to be lost.

• We asked the trust for records of how many occasions staff contacted the safeguarding team and were unable to speak directly to a member of staff but required to leave a message. The trust did not keep records of this information.

Cleanliness, infection control and hygiene

- Following our previous inspection the trust were issued with a requirement notice requiring them to manage domestic, clinical and hazardous waste materials in line with current legislation and guidance. From data supplied by the trust and from observations made during the inspection we established the trust had taken actions in response to this notice.
- The trust had made some improvements to the management of waste and in most areas we inspected it was managed in line with legislation and guidance. In those areas where we found this not to be the case the trust confirmed they had taken action following or during our inspection to address our concerns.
- Vehicles were visibly cleaner than on our previous inspection, there was a documented process for identifying when a vehicle was due to be taken off the road for a deep clean. Staff confirmed vehicles were now deep cleaned in line with the planned schedule of every 42 days. The vehicles we observed were within their scheduled cleaning dates.
- During 2016 there was an internal infection prevention and control (IPC) audit programme covering trust vehicles, staff adherence to IPC procedures and ambulance station environments carried out by the trust's IPC team. A report was produced in October 2016. From data supplied by the trust an audit of 50 vehicles showed compliance across the divisions of 58% to 85% against a trust target of 95%. Common areas of concern were dusty or dirty equipment and fittings and waste not segregated appropriately. We did not find these concerns on the vehicles we inspected.
- Vehicles contained sufficient personal protective equipment and the majority of staff we observed used this in line with the trust's April 2016 infection prevention and control (IPC) operational procedure. Reusable equipment was cleaned after patient use and

all equipment in the ambulances was noted to be visibly clean. We observed a crew thoroughly cleaning the inside of vehicle outside of an emergency department and specific equipment was kept at this location for this purpose.

- However personal issue of protective equipment was not available for all staff. Following our previous inspection the trust were issued with a requirement notice as 39% of staff had been fitted for and trained in the use of filtered face piece masks. These are masks used to protect the wearer from infection. On this inspection data supplied by the trust showed as of January 2017 divisional compliance ranged between 80% for Northamptonshire and 32.3% for Nottinghamshire, with compliance in Derbyshire at 56.4%, Leicestershire at 64% and Lincolnshire at 74.5% against a trust target of 100%. The majority of staff we spoke with had been fitted with and trained in the use of their face masks however in Leicestershire, 11 of the 29 staff had not got their masks with them on the vehicle. Staff who had not received one were waiting for an additional fitting. There were some staff who were unclear on which specific infections would trigger its use. One member of staff demonstrated how it was worn.
- There had been some improvements in the cleanliness at some ambulance stations; we noted significant improvements at the stations in Nottinghamshire. In Lincolnshire some stations had limited space and this impacted on their ability to segregate clean areas from areas where cleaning took place. This had been highlighted on an infection prevention and control audit in November 2016 and was managed via the central risk register. The station was waiting for the estates department to make improvements to the environment. The trust told us they implemented an interim solution involving bagging and tagging clean items.
- At one station in Northamptonshire we did not see improvements in the storage of sterile consumables. Shelving was not wipe able and although plastic boxes had been used to improve the cleanliness of some stored items we noted the inside of one of these boxes to be visibly dirty and other items were stored in their original packaging on wooden shelving.
- The trust's IPC audit of 16 stations across all divisions reported compliance rates of 58% to 88% against a trust target of 95%, areas of non-compliance included dusty and dirty surfaces and a lack of up to date IPC

information on station notice boards. In Leicestershire, we noted infection prevention and control hand decontamination audit results displayed from October to December 2015.

- At a station in Leicestershire, we saw equipment waiting for repair, segregated from other equipment and accompanied by a completed decontamination form, this was in line with the trust's infection prevention and control operational procedure.
- Infection, prevention and control training was part of the trust's mandatory training programme, with a yearly course being provided for all front line staff. Data from the trust showed three out of five divisions were on track to achieve the 95% target for completion of the yearly course.
- Staff had access to documented infection prevention and control advice in the trust's infection prevention and control policy and procedures we saw the contact details of the trust's infection prevention and control team were displayed at some stations.

Environment and equipment

- Following our previous inspection the trust were issued with a notice requiring them to make sure all premises and equipment were properly used and maintained. A notice was also issued which required the trust to make sure there were sufficient ambulances to meet the demands of the urgent and emergency care service in order to attain and sustain national target response times for Red 1 and Red 1 calls. The national standard for ambulance services is to send an emergency response, with a defibrillator, within eight minutes to 75% of Red 1 and Red 2 calls.
- We visited 30 ambulance stations across the five divisions, and inspected 60 vehicles the majority of equipment in the stations and on vehicles was in good condition, maintained and within service date. In two of the five divisions, Lincolnshire and Derbyshire all equipment we checked was within its service date and sterile single use items were in date.
- In Leicestershire, 11 ambulances contained equipment outside of the scheduled service dates or sterile items there out of date. There were 13 items of equipment outside of their scheduled service date; most services should have been carried out within the previous six months. These were mainly parts of equipment used to deliver oxygen on the vehicle to the patients. There were 11 single use packaged items out of date, all the dates

had expired in the previous six months and the packaging was still intact. All of the concerns we identified were raised with the crews or senior staff at the time of the inspection and the crews took action to remove the packaged sterile items out of use.

- Information provided by the trust following the inspection provided a record of the actions taken in the Leicestershire division to address the equipment which had been found outside its service date.
- On our unannounced inspection, we inspected 17 ambulance vehicles in Leicestershire and found significant improvement in maintenance of the equipment on the vehicles. We found the equipment on 14 of the vehicles to be within the scheduled service dates and all consumable items we checked on these vehicles were in date. Of the other three vehicles, one had two items of equipment which should have been serviced in December 2016, and on the other two vehicles there were a total of three single use sterile items passed the date they should have been used by. The out of date equipment was immediately taken out of use by the crews and the un-serviced items were reported to senior staff.
- In Northamptonshire and Nottinghamshire, we identified a much smaller number of concerns. In Northamptonshire, there was one item of equipment where there was no clear mark on the equipment of when the service was due. In Nottinghamshire there was service date which was not clear and two items past passed their service date by three weeks. The clinical team mentor in Northamptonshire had was already aware of the poor quality service due sticker and had reported it to the medical devices department.
- Staff explained there was usually sufficient equipment and sterile supplies available for them to carry out their role. When they did find they were short of essential equipment they liaised with the emergency operations centre (EOC) to obtain supplies from a local station. On occasions, this meant the vehicle had to be taken off the road while essential supplies were obtained.
- As part of the trust's quality improvement plan implemented following the previous inspection in 2015, a new system had been introduced for the recording of the trust's medical devices. This had been completed by the end of 2016 and all equipment had been audited and central database held the details of all equipment and their servicing requirements. We visited the fleet

department and saw how this system operated to track trust equipment and identify when it required servicing. We reviewed 12 vehicle records and noted all equipment was within service date.

- Staff were required to check vehicles at the start of their shift and complete the trust's safer ambulance check sheet document to record their findings. The checks were separated into red and green checks, the red being essential checks must be completed prior to using the vehicle and the green checks were those which needed to be completed at some point during the crews shift.
- As on our previous inspection staff explained they felt they did not have sufficient time to complete these checks thoroughly and just the very essential checks were completed at the start of a shift. When vehicles had not been used immediately prior to the crew coming on duty they had to rely on the previous crews stocking the vehicle prior to it being left. No checks were made on vehicles on the days they were not in use and therefore there was the potential for equipment to be removed to be used in other vehicles.
- We reviewed the safer vehicle check books on 36 vehicles and found the checks had been appropriately completed on 33 vehicles. In Leicestershire two crews had not recorded that any checks had been completed on the day we inspected the log and the vehicle had been in use that day. One of the crews stated they had not had time to record the checks. A third vehicle did not have a log book; the crew explained this was a new vehicle. We escalated our findings to the crews at the time of the inspection.
- As part of the red safer vehicle checks the crews checked the vehicles portable suction equipment. We observed staff in three divisions checking this suction equipment. We were concerned the process used was not in line with the manufacturer's instructions for testing the equipment. Following the inspection, we raised our concerns with the trust. They provided a copy of the manufacturers checking procedures and this confirmed the staff we observed checking the equipment had not followed the correct procedure.
 - Clinical team mentors and team leaders performed ad-hoc spot checks of the safer vehicle check books to evaluate if the checks were being recorded. The trust provided data to evidence the spot checks had been completed in all divisions. Where there were occasional non-compliances documented which included a few

occasions when there was no log book on a vehicle and where crews had stated they had insufficient time due to being allocated a call, the actions taken to raise this with the crews were also documented.

- Since our previous inspection in 2015, the trust had increased the number of vehicles they had available to respond to calls. Sixty six additional and new vehicles had been purchased and the trust had decommissioned one of their older vehicle stock. Staff explained there were more vehicles available than in 2015. The additional vehicles meant crews coming on duty did not have to wait for the crew finishing their shift returning to the station before the next crew could start. Staff explained there was less waiting at stations for vehicles and we observed this during the inspection.
- The trust had employed fleet drivers to move the vehicle and equipment to the required location, however in Northamptonshire the operational team leaders were responsible for driving spare vehicles to the stations where they would be next required.
- Vehicles were taken off road for their scheduled servicing and MOT tests, a sticker was displayed in the windscreen of the vehicles as a reminder as when these dates were due. The fleet services contacted the stations to arrange for the vehicles to be taken off road. In Northamptonshire we were informed there is not always sufficient notice of vehicles required for maintenance. We observed an example of this when the team leader received an email from the fleet workshops informing them three vehicles were to be taken off road the following day.
- At some stations, there were some concerns with the general safety of the environment, which we escalated to the trust. In Derbyshire, there was a potential electrical safety hazard identified from multiple electrical extension cables being used from one power supply. This had been done to increase the amount of equipment batteries which could be charged. At one station we saw how the vehicular entrance and exit from the station was regularly being used by the general public as a walkway despite trust signage warning them of the dangers of doing this. In Northamptonshire a fire extinguisher was overdue its service.

Medicines

• Following our previous inspection in 2015 the trust were issued with a requirement notice requiring them to ensure the proper and safe management of medicines.

We had concerns medicines were not always stored securely, that medicine audits were not always completed and the trust policy on controlled drugs was not always followed. Controlled drugs are medicines which are controlled by the Misuse of Drugs Act 1971.

- Data supplied by the trust showed actions had been taken following the 2015 inspection to address the medicine management concerns which had been raised. All divisions had conducted a self-assessment of their medicines management and these had been reviewed by a senior clinician in the trust. Checks were being completed at stations and on vehicles to review the accuracy of records and stock balances and the use of countersignatures.
- On this inspection, we found the trust had made improvements to the management of medicines. In an ambulance station in Lincolnshire, we saw the security of the medicines had been improved by moving the location of the storage. In stations across the divisions, the access to medicine storage areas had been restricted and new procedures were in place. Access was restricted to authorised trust staff who could access the station medicine stores promptly at any station but prevented any unauthorised access. Where medical gas cylinders were stored in publically accessible areas outside of ambulance stations these were locked to restrict unauthorised access.
- We reviewed controlled drug storage records. All 30 records we checked showed accurate stock balances to the current stock levels of the medicines. From reviewing the records, we saw an increase in the number of countersignatures present on the controlled drug records compared to our previous inspection. It is considered good practice by NHS Protect to have a countersignature to ensure a robust audit trail however it is recognised when clinical staff work alone it is not possible to always obtain a witness signature. NHS protect is responsible for tackling fraud, violence theft and criminal damage in the NHS.
- Where there had been a previous stock discrepancy recorded in a controlled drug book the team leader was able to produce records to show how this had been followed up with the staff who had worked on the vehicle. The stock balance was correct and one administration record had required updating.
- The stock levels of controlled drugs on the vehicles were checked when the vehicle was in use, current

procedures did not ensure there was a robust audit trail of access to the vehicles drugs, which was not best practice, however this had been risk assessed by the trust and the process remained unchanged from 2015.

- Staff we spoke with had a good understanding of the trust procedures for the safe storage and administration of medicines and were able to explain the procedure for returning unwanted medicines to a central location. At a station in Leicestershire, out of date intravenous fluids had been removed from their usual storage location, however they had not been placed in medicines returns bag nor were they were they sufficiently segregated from in date stock to prevent them from being placed on a vehicle. We raised this at the time of inspection.
- We observed the administration of four medicines which included medicines administered both orally and intravenously. All the medicines were administered in line with the trust policy.
- Staff were updated to changes in the trust's medicine policy and to any alerts issued by the Medicines and Healthcare Products Regulatory Agency (MHRA) via clinical bulletins and via the trust's e newsletter. At a Northamptonshire station, we saw information displayed which updated staff on the process for returning out of date medicines to a central medicine location for destruction.
- Staff were encouraged to report medicine related incidents and this was reflected in the medicine incidents recorded on the trust's internal incident reporting system. From data supplied by the trust from June to November, 262 medicine related incidents had been reported. The majority 67% (175) were from front line staff reporting discrepancies in stock balances. Incidents reported where the wrong drug, wrong dose or wrong medication route had been chosen accounted for 6% (15) of the incidents.

Records

- Following our previous inspection in 2015 the trust were issued with a requirement notice requiring them to ensure patient records were kept secure on vehicles and at ambulance stations.
- On this inspection, we found actions had been taken to address the concerns previously raised. There were notable improvements in the security of patient's records completed and retained by the crews whilst away from their base stations. There had also been

changes to the storage arrangements for patient records and confidential waste at all the ambulance stations we visited. Information governance relating to patient records had been included in the mandatory training programme.

- Of the 60 vehicles we inspected there was one patient record form (PFR) found with a patient's confidential information stored in an unsuitable location. This was visible through the vehicle windscreen in an unlocked, unattended vehicle. Immediate action was taken to protect the information and the crew were informed. In all the other vehicles we inspected staff stored patient record forms appropriately.
- We observed staff placing completed PRFs in the station storage bins at their earliest opportunity and records we reviewed at stations showed forms were regularly stored at the stations, some forms were from the same day as the inspection.
- There had been a change to the trust's procedure for the storage of confidential waste and completed patient record forms (PRFs) which were waiting to be collected and taken to the audit department. Storage boxes had been provided at each station, at the majority of stations we visited these were located in a room with restricted access by means of an electronic fob. A team leader in Leicestershire confirmed non-clinical staff had access to this room and therefore access to confidential information which was not relevant to their role. During the week of the inspection, the trust took action to address this and we found access had been restricted at some stations we visited. In Lincolnshire, at one station the storage bins were in the station office, which may not always have been occupied however this room was lockable.
- In Nottinghamshire and Lincolnshire, staff explained the boxes were secured with a tag prior to their removal from the station.
- We reviewed 63 hand written patient record forms and seven electronic patient record forms. As on the previous inspection, the trust used electronic and paper records for recording patient information. Some staff raised concerns about the electronic devices used to complete the electronic record could be unreliable. The trust provided information that an order had been placed to purchase new electronic patient record devices for all divisions.
- All the records we reviewed had been fully completed, on the hand written records, writing was legible and

signed, records contained the incident number, details of the presenting condition, patient observations and a record of the treatment provided. Where patients had not been conveyed to hospital and left at home a patient signature had been obtained on the form.

If the trust held a record on their database of a patient's do not attempt cardiopulmonary resuscitation (DNACPR) decision or an advanced decision to refuse treatment then the emergency operations centre would notify the crews that this was noted for the address. Crews confirmed they would always seek a written record on arrival at the call location and treatment would be administered until any legally applicable and valid records directed them otherwise.

Assessing and responding to patient risk

- Crews were dispatched to emergencies by the emergency operations centre (EOC). All calls were assessed as to their level of priority using an Advanced Medical Priority Dispatch System. (AMPDS). The emergency medical dispatches in the EOC asked a series of pre-determined questions, the answers to which determined the level of response the caller required.
- The trust's conveyance and referral policy ensured a standardised approach was taken to decisions on whether a patient needed to be conveyed, referred to another health care professional or treated at the scene without the need for a referral. To assist the crews in their assessment and decision making process they used the paramedic pathfinder clinical decision-making tool. Staff used this tool in conjunction with their own clinical knowledge, professional judgement and experience to care for the patient covey them to other health care services where necessary.
- The national early warning scoring system (NEWS) was used in conjunction with the paramedic pathfinder to help promptly identify changes in the patient's condition and ensure appropriate treatment was provided. The patient's vital signs were given a numerical score which was used to determine changes in and severity of illness. The tool also provided a standardised communication format for relaying the information to other health professionals.
- Staff could obtain advice from the clinical assessment team in the EOC if there were changes in the patient's

condition and they required additional support. The clinical assessment team (CAT) were available twenty-four hours a day. Staff explained they were able to contact the CAT desk at any time.

- If a rapid response vehicle was the first to arrive on scene a decision would be made whether the patient required conveyance to hospital or to another care setting. If conveyance was required a request was made via the EOC and a double crewed ambulance dispatched to the scene. An assessment of the patient's condition determined if a paramedic, where available was required to accompany the patient to the hospital. This enabled intravenous pain relief to be given or invasive procedures that only paramedics could perform, to be carried out on route.
- When seriously ill or very unstable patients were conveyed the crews pre alerted the hospital's emergency department prior to their arrival. This ensured the patient could be transferred to the hospital's care with the minimum of delay. We observed the arrival of a patient at an emergency department in cardiac arrest, the hospital was ready for the patient and there was no delay in the patient being transferred into the hospital.
- The trust were trialling an initiative in North and North East Lincolnshire where patients who were assessed as having septicaemia had blood cultures taken by the ambulance staff and were given their first dose of antibiotics prior to them arriving at hospital. This enabled prompter treatment to be given to patients with a potentially life threatening illness.
 - Due to the demand for hospital emergency department services, patients arriving by ambulance were sometimes delayed in their care being handed over to the hospital staff. In Leicestershire, we observed patients having to wait in the ambulances because the emergency department was unable to safely care for any more patients. Where there were delays at acute hospital emergency departments escalation procedures were in place with standard operating procedures agreed with the acute trusts. A team leader from the ambulance trust would act in the role of hospital ambulance liaison officer (HALO) to facilitate a timely and safe handover of patients to hospital staff.
- Patients arriving at the department by ambulance remained in the care of the ambulance staff until they could be handed over to the care of hospital staff.
 Patients waiting for admission were assessed based on

their current condition and treatment needs given a dynamic priority score. This was part of a standard operating procedure at this hospital. This score identified the level of priority the patient's current condition required. A member of the ambulance crew remained with the patient at all times and there was on-going monitoring of observation and care delivered in the ambulance. A written record of the care was maintained.

- We observed the care of a patient who arrived at the emergency department and remained in the ambulance. The crew continued to monitor the patient and remained in contact with the hospital department to keep them updated on the patient's condition. When patients remained in the back of an ambulance their dynamic priority score was reassessed to make sure changes in their condition were taken into account and their needs responded to.
- The trust had teams of volunteer community first responders (CFR) to respond to emergencies in their own communities whilst EMAS resources were travelling to the scene. The volunteer responders were often able to reach patients in remote rural locations quicker than an EMAS vehicle could respond. In the rural counties, for example Lincolnshire, this enabled lifesaving help to be on scene as quickly as possible. The CFR was able to relay patient information to the clinical assessment team in the emergency operations centre.
- Where a patient's condition suddenly deteriorated and a crew on scene needed additional help, a request was made via the EOC and an additional resource was dispatched urgently. Where urgent resources were required and there were no resources showing on the dispatch system as available, then an urgent call went out to all staff. This call could be responded to by staff stood down from duty for their break or by staff who were qualified but not allocated to clinical duties at the time.

Staffing

- Following our previous inspection in 2015 a warning notice was issued to the trust which required them to ensure there were sufficient numbers of suitably qualified, competent, skilled and experienced staff employed to deliver safe care and treatment and meet national response targets.
- On this inspection we found the trust had taken actions which had been successful in increasing the number of

front line staff. As part of the trust's wider improvement plan, the trust's workforce plan had focused on recruiting and retaining sufficient staff and ensuring they had the correct skill mix to meet the demands of the service. However from April to November 2016 the availability of front line staff did not meet the number of resources that were required across all divisions, despite achieving the numbers agreed by commissioners.

- There had been a recent pricing review and a capacity and demand review of the service was being completed. The outcome of these reviews were to be used to inform the contracting process with the clinical commissioners to determine the workforce needs for future delivery of the service.
- The trust had completed a recruitment campaign using a variety of methods including social media, their new careers website, a campaign to recruit qualified paramedics from overseas and they had developed partnerships with higher education institutions. The campaign aimed to improve the skill mix and increase the numbers and flexibility and of the workforce.
- The trust had recruited an additional 398 operational and emergency operations centre staff and 27 international paramedics. The skill mix of the workforce had been improved to 84% qualified to 16% unqualified as the focus of the recruitment had been on staff who were already qualified and staff who would complete technician training.
- The trust's urgent and emergency care workforce consisted of approximately 95% of the staff who were directly employed by the trust and 5% who were bank or agency staff. As of the end of November 2016 the trust reported a vacancy rate in urgent and emergency care of 2.8% which equated to 61.4 (WTE) positions. All divisions had some vacancies however there was some variation across the divisions. Leicestershire had the lowest vacancy rate of 0.1% and Northamptonshire the highest at 6%.
- The number of ambulance hours the service planned to have available compared to the number of hours that were provided was recorded as the fill rate. Where the trust could not supply enough of its own double crewed ambulances (DCAs) then an independent ambulance service would be contracted to provide the service on behalf of EMAS.
- Leicestershire was the only division that met the fill rate for DCAs during April 2016 to November 2016. No

divisions consistently met the fill rate for solo responders during the same time period. In Northamptonshire the fill rate for solo responders was consistently low, from April 2016 to November 2016 the lowest rate was 49.6% and the highest was 66.2%. Although additional DCAs were made available on some occasions this did not compensate for the low fill rates of solo responders.

- From April 2016 to November 2016 the trust reported similar staff turnover rates across the urgent and emergency care workforce, 5.7% for emergency care assistants, 5.6% for registered staff (including mangers) and 5.7% for technicians. During the same timeframe sickness rates across the divisions were variable. The division with the lowest average over the eight months was Lincolnshire at 6.5% and the highest in Northamptonshire 8.0%. Sickness rates across urgent and emergency care had shown a slight rise in trend towards the later months of 2016. However, sickness absence for 2016/17 was 5.9% compared with 6.3% for 2015/16 so showing a slight improvement.
- Staff explained there had been a change to shift rostering, this had been moved from a central team to divisional level and this had been an improvement. A team leader explained staff were either rostered on a permanent rota with their shift pattern including their leave rostered up to 12 months in advance or on relief. All staff new in position were initially on relief; relief staff did not have a permanent shift pattern and usually had two weeks rota planned in advance. Their shifts could be changed with a minimum of 24 hours notice and they could be asked to work from any station.
- Staffing numbers and skill mix were monitored on a daily basis. Team leaders checked the rotas in a morning. A conference call was then held by the team leaders and the local quality managers to review the level of cover and make any necessary changes for example to cover last minute sickness.
- Staff who were on relief had varying views on the position. Some liked the flexibility but most felt they didn't have the opportunity to be part of a team of staff, the short notice changes impacted negatively on their work life balance and both rostered and relief staff found it difficult to book leave. Staff who had recently moved to a permanent position on the rota were pleased.

- Two members of staff gave examples where they had requested leave 18 and 24 months in advance and their request had been refused. There was an option to swap a rostered shift with a colleague of the same experience and skill level.
- On the previous inspection staff were frequently not getting their allocated breaks during their shifts and finishing late. The majority of staff we spoke with felt getting their breaks had improved however staff were still regularly finishing their shifts late. When staff were delayed handing over a patient at the emergency department this had on occasions caused them to be several hours late off shift.
- Where staff were due to return to shift the following day they would be given the appropriate hours off duty before their next shift. Data supplied by the trust showed the monthly additional hours worked because of late finishes was 13,241 for January 2017. The trend (apart from a slight decrease in September 2016) was upwards since August 2016 where the figure was 11,060 hours.
- Across all the divisions staff told us and we saw there were less crews comprising of two emergency care assistants (ECA). Where this had happened on the rota in one division the team leader had changed the rota and both care assistants were crewed with a trained member of staff. Where there were double ECA crews they were assigned health care professional requests for conveyance.
- Clinical team mentors (CTM) and team leaders explained there were challenges with supporting the number of new inexperienced staff, particularly as they understood in the new operational structure there would be fewer clinical team mentors (CTMs). Staff in all divisions raised this concern.

Anticipated resource and capacity risks

- The trust had a comprehensive business continuity policy and process which set out business continuity management arrangements. These arrangements ensured critical functions were maintained during a major incident or business disruption.
- The trust identified a wide range of challenges that could threaten their ability to deliver normal services including severe weather, fuel shortages, an information

technology system failure or extreme demand for their services. By identifying the potential difficulties it enabled the trust to be prepared to deal with the problems should they arise.

- The trust used a capacity management plan (CMP). This helped manage demand and resources during high periods of demand, where the supply of normal ambulance service resources was insufficient or potentially insufficient to meet the clinical demand of patients. The aim of CMP actions were to maximise responses to the most seriously unwell patients. Following a review of the trust's CMP there were now four levels to the plan. This had brought the plan in line with the number of Resource Escalation Action Plan (REAP) levels. Early in January 2017 the trust had escalated their CMP level to four and declared a business continuity incident.
- Resource Escalation Action Plan (REAP) levels are a national indicator of the demands and pressures on ambulance services. The level the service operates at determines the actions required to continue to supply the best level of service. Factors taken into account by the trust when determining their REAP level included their response times to Red 1 and Red 2 calls, the demand for the service over their contracted amount and the number of calls from the NHS 111 service that required a 999 response.
- Front line crews were aware of the difficulties severe weather could pose to the service. In deep snow additional vehicles were used with four by four capabilities and there were volunteer drivers who would assist the service. Staff were asked to go to the nearest station from their home address.
- During the inspection there were severe weather warnings in place for extremely high winds. In Northamptonshire we observed a senior manager liaising with several partner agencies via a teleconferencing call where current information was disseminated and potential concerns relating to the winds highlighted. The manger had on going access to live data via a resilience website and could update partners with any information for example road closures. EMAS staff were sent a text reminding them to allow sufficient time for their journey into work due to the severe winds.
- The education centre in Leicestershire had carried out an exercise of continuing their services in the event of an

information system failure. The exercise had highlighted areas of learning including for essential information to be backed up off the main computer system. This would enable access to the information should the main system fail.

- Mangers in Northamptonshire and Leicestershire explained the fast response vehicle (FRV) resources were being managed differently. There was a moving stand by plan which aimed to make the most appropriate use of FRVs. The vehicles would respond to different levels of calls dependant on the number of vehicles available in the area. If there were four FRVs available they would respond to all cars, if three cars they would respond to Red calls and most Green 2, if there was just one FRV then this would only respond to a Red 1 life threatening emergency call.
- Establishing the number of staff required to meet the fluctuating demand was managed via a central resourcing team. Data from the previous five years was used to inform resource planning. Seasonal trends as well as more predictable changes to demand for example special events were all taken into account to determine staffing and vehicle resource requirements.

Response to major incidents

- During the previous inspection in 2015 we found some front line staff had not received any major incident training and some more senior staff with operational responsibilities in the event of a major incident had also not received any training for their role.
- On this inspection we established actions had been taken by the trust to provide front line staff with the information and knowledge they needed to respond to a major incident.
- The Civil Contingencies Act 2004 (CCA) set out the duties and responsibilities of ambulance services to have arrangements in place to respond to all major incidents. The CCA also required ambulance services to provide training and exercises for their staff to ensure the service is prepared to respond to a major incident. A major incident is any emergency that requires the implementation of special arrangements by one or all of the emergency services. Incidents of this nature will generally involve either directly or indirectly large numbers of people.
- As part of the trust's quality improvement plan all front line staff were to complete an e learning training package provided by National Ambulance Resilience

Unit (NARU) and be provided with major incident action cards. Staff we asked had received action cards providing them with an aid memoire in the event of a major incident and had them available to use.

- From data supplied by the trust 89% of frontline staff had completed initial operational response training (IOR) which contained some elements of major incident training. We spoke with staff who had completed their on line major incident training. Training and knowledge on major incidents was variable. Some staff had received training many years ago and had not completed an update. Staff who had recently finished or were in the process of training for their role had received training.
- The majority of the team leaders and clinical team mentors (CTMs) we spoke with who had operational responsibilities in the event of a major incident had received bronze commander training to support them in their role. In the event of a major incident team leaders and CTMs would be a bronze commander; this role is part of a nationally recognised command and control structure used to manage major incidents. Senior managers would take more responsibility as silver and gold commanders and during the inspection some senior managers were attending a multi-agency gold incident command course.
- A specific training data base had been established to record all emergency planning and incident command training and learning from major incidents. Training records showed operational staff had attended multi-agency simulation exercises since our previous inspection. Some of the team leaders and clinical team mentors we spoke with confirmed they had attended multi-agency training exercises to prepare them for a major incident.
- There was a new standardised approach to identifying and sharing learning from major incidents via a specialist online tool. We reviewed three major incident debrief reports which all included feedback from EMAS staff involved in the incidents. Good practice and learning was identified and had been shared. We followed up on one action from a debrief report, for all clinical team mentor and team leader cars to contain a commander pack to ensure sufficient causality documentation at the scene. From the vehicles we inspected we established this action had been completed.

Are emergency and urgent care services effective?

(for example, treatment is effective)

Requires improvement

We rated effective as requires improvement because:

- There had not been significant improvements made in the response times to Red 1, Red 2 and A19 calls since the CQC warning notice was issued to the trust in July 2016. The national performance targets had not been met for Red 1, Red 2 or A19 calls during 2016. The trust's performance for Red 2 and A19 calls was below the England average response rate throughout 2016.
- The trust faced increasing demand for both Red1 and Red 2 responses and more patients were left without the required response for all red calls from August 2016 to December 2016 than in the same time period the previous year.
- There was no trust procedure to establish whether staff had received, read and understood the information the trust provided on changes to policy and procedure, therefore all staff may not have always delivered the most current evidenced based care.
- The training programme on mental health illnesses and the Mental Capacity Act 2005 had not been established until September 2016 and therefore a large proportion of staff still required their training. We raised a concern about lack of training at our inspection in November 2015.

However

- Patients received comprehensive assessments of their needs. Care and treatment was planned and delivered in line with evidenced based and best practice guidance.
- Training was a trust priority and most staff felt supported to achieve and maintain the clinical competence and knowledge they required to deliver effective care. However, staff had to attend some of the non-mandatory training in their own time.
- Staff had received timely appraisals which had been perceived by most staff to be a meaningful process and had helped them identify areas for further development and reflect on their current practice.

- The initial care provided to patients suffering heart attack or a stroke was in line with or better than that provided by most other ambulance trusts during the first nine months of 2016.
- Effective multidisciplinary working took place and there was a coordinated approach to service delivery with other providers and partner agencies across all divisions.
- Staff showed understanding of the principles of consent and the principles of the Mental Capacity Act 2005 were followed

Evidence-based care and treatment

- Patient care and treatment followed evidence based guidance. Treatment was planned and delivered in line with national guidance from the National Institute for Health and Care Excellence (NICE) and the Joint Royal Colleges Ambulance Liaison Committee (JRCALC). We saw evidence of staff following NICE guidance during our observations of care provided to a patient with shortness of breath and chest pains.
- Policies were evidence based, for example, the trust's stroke care policy was based on the national stroke strategy, and JRCALC guidance. This ensured patients suspected of having a stroke received safe and effective pre hospital care and were conveyed to the most appropriate stroke facility.
- Evidence based tools were used to assess and monitor a patient's condition; a copy of the national early warning system tool was displayed in all vehicles. Staff used this tool to make sure changes in a patient's condition were quickly recognised and the appropriate treatment provided.
- Trust policies and procedures were available on the trust's intranet site. Policies were approved by the trust's clinical governance group and were scheduled for review. This ensured they contained current and best practice guidance. Clinical governance meeting minutes provided evidence of updates being made to procedure and policy documents.
- Staff were updated on changes to clinical practice via email, via the trust's on line staff newsletter and via clinical bulletins which we observed were displayed at ambulance stations. Several staff explained they received so much information it was difficult to read every document. Senior staff explained there was no trust procedure to record which staff had received, read and understood the clinical or procedural updates.

- In a regulation 28 prevention of future death report sent to the trust in January 2017 the coroner had raised a concern that most staff attending an emergency in March 2016 had not been aware of a change to local policy on diagnosis of death, which had been made a month prior to the emergency. The coroner also informed the trust that nothing the ambulance staff did would have changed the patient's outcome. Prevention of future death reports are produced where the coroner believes that action should be taken to prevent future deaths. The trust were in the process of preparing a response for the coroner within the timeframe specified by the coroner.
- On the previous inspection in 2015 some divisions did not have clear evidence based care pathways for patients experiencing mental health illnesses. On this inspection we found the trust had progressed its mental health strategy. Divisions had developed closer partnership working with the police and mental health professionals which had improved mental health care pathways. The pathways provided alternative care options for patients to being conveyed to emergency departments unless admission to the emergency department was really necessary. We observed a crew providing support for a patient experiencing mental health difficulties, the crew tried to arrange support for the patient in the community.
- Since the previous inspection, the trust had developed a mental health conveyance policy which provided guidance for staff on the conveyance of patients detained under the Mental Health Act 2005. This ensured practice was in compliance with the Act and relevant codes of practice. Front line staff spoke of some improved access arrangements to mental health services but some staff felt accessing mental health care remained a challenge.
- In Leicestershire, an EMAS paramedic now worked with a specialist mental health professional from another provider. This ensured patients received quicker specialist care delivered in the most suitable location. However there was concern this service was limited to an evening service and may not be continued throughout 2017.
- A similar service had continued to be provided in Lincolnshire On our previous inspection paramedics staffed the mental health car on a voluntary basis however this was now a rostered position from 4pm to

midnight seven days a week. In Derbyshire crews had access to a mental health advice assessment hub, which meant patients were assessed by a qualified professional and support was provided for the crews.

- EMAS were involved in local and national pre hospital research. Research participation during the previous 12 months included a national study on the clinical and cost effectiveness of different equipment used to manage patient airways. Airways are used when patients were unable to breathe for themselves. In September 2016 the trust reported over a third of EMAS clinicians were involved in research.
- The trust's clinical audit and research department aimed to ensure standards of clinical care were set, maintained and monitored and audit outcomes led to improvement in patient care. Improvements were instigated via the trust's clinical governance and clinical effectiveness groups.

Assessment and planning of care

- Since our previous inspection the trust had implemented a new on scene conveyance and referral procedure to ensure decisions on whether a patient should be conveyed or referred to another health care professional were consistent and ensured patient safety.
- We observed staff assessing patients immediately on their arrival at the patient's location. An initial visual assessment was completed and where appropriate, questions were asked to establish the history of events. Initial clinical observations were taken and all the information was recorded on the patient record form. A second set of observations were recorded to identify changes to the patient's condition. Continuous monitoring and assessment of a patient's heart rate and oxygen saturation could be carried out where necessary. This ensured any changes in a patient's condition would be identified quickly.
- The findings from the clinical assessment process were used to inform the staff's decision on the most appropriate pathway of care for the patient. Staff appeared confident in making these decisions and involved patients and where possible their families in the choices that were available. A clinical advice team (CAT) based at the emergency operations centre provided clinical advice and supported front line staff in their decision making where necessary.
- A national early warning scoring tool was used to help crews promptly identify serious or life threatening

symptoms. This was a standardised assessment tool used to determine and communicate acute illness severity. This assessment tool ensured the severity of illness was recognised early which enabled prompt and effective care to be provided.

- There were documented care pathways in place, these included for patients who had experienced an acute stroke, heart attack or suffered serious traumatic injury. Staff appeared knowledgeable and identified the most appropriate pathways for patient's and spoke of ensuring patients were conveyed to the most appropriate care setting.
- Where patients had specific clinical needs, for example symptoms of an acute stroke, or blocked blood vessel to their heart, or women who required maternity services then pathways were in place to facilitate direct and timely admission to these services without attending the emergency department. In Lincolnshire, EMAS staff had direct access to the Lincolnshire Heart Centre for patients requiring primary percutaneous coronary intervention following a heart attack. Primary percutaneous coronary intervention is a procedure to treat the narrowing of the arteries of the heart.
- Staff assessed patients and identified those where admission to the local emergency department or other acute care services was not required. Some patients were supported and received advice which enabled them to care for themselves, others required a referral to alternative health or social care services. To support staff make these decisions they had access to a paramedic pathfinder clinical triage tool. This tool supported crews to make the most effective referral and treatment option decisions for patients. Alternative treatment options included, referring a patient to the out of hours GP service, community nursing or community therapy services. We observed the pathfinder tool used during the care of a patient nearing the end of their life and for another patient requiring support for a mental health illness.
- Where patients were seen in response to a call to EMAS and then treated at the scene and not conveyed this was known as see and treat. Patients who were discharged at the scene were provided with a record of the care and advice they had received. The trust's on scene conveyance and referral procedure standardised

the decision making process for determining the appropriate outcome of whether a patient should be conveyed or if a referral to another health professional was indicated.

Response times

- Incoming emergency calls were categorised based on their degree of urgency. The trust used an Advanced Medical Priority Dispatch System (AMPDS) to determine the most appropriate response for the call based on clinical need. Red 1 calls were the most time critical calls they covered cardiac arrest patients and other severe conditions for example an airway obstruction. Red 2 calls were serious but less time critical and included the response required for patients suffering a suspected stroke or having a fit.
- The national standard for ambulance services was to send an emergency response, with a defibrillator, within eight minutes to 75% of Red 1 and Red 2 calls. These were known as Category A calls. A second standard (A19 Standard) required a fully equipped ambulance to be sent to 95% of Red 1 and Red 2 calls within 19 minutes of a request being made for a vehicle to convey a patient to hospital. The ambulance needed to be suitably equipped to safely transport a patient.
- Following the previous CQC inspection in 2015 the trust were issued with a warning notice in July 2016 which required the trust to make significant improvements in their response times to Red 1 and Red 2 calls by the 30th November 2016.
- During this follow up inspection we found there had not been significant improvement in the response times to life threatening emergency calls or to the response of providing a vehicle equipped to convey a patient to hospital. From August 2015 to December 2015 and from August 2016 to December 2016 EMAS did not meet the national response targets for Red 1, Red 2 or A19 calls.
- From August 2016 to December 2016, 6,578 patients required a Red 1, eight minute response from EMAS, 4,563 patients (69.4%) received an eight minute response. Compared to the same five month period in 2015 this showed a very slight improvement on the percentage (68.2%) of Red 1 calls responded to within eight minutes.
- From August 2016 to December 2016, 136,702 patients required a Red 2 eight minute response from EMAS, 78,237 patients (57.2%) received an eight minute response. Compared to the same five month period in

2015 this showed deterioration in the percentage (60.8%) of Red 2 calls responded to within eight minutes. As the number of patients requiring a Red 2 response had increased in 2016, this meant 46,773 patients had not received an eight minute response between August to December in 2015 and 58,472 Red 2 calls did not receive an eight minute response during the same five month period in 2016.

- From August 2016 to December 2016, 142,926 patients required an A19, 19 minute response from EMAS, 120,060 patients (84%) received a 19 minute response. Compared to the same five month period in 2015 this showed deterioration in the percentage (87.2%) of A19 calls responded to within 19 minutes. As the number of patients requiring a resource to convey had increased in 2016 this meant 15,745 patients had not received a 19 minute response between August to December in 2015 and 22,866 patients had not received the 19 minute response in the same period in 2016.
- Due to changes in operational practice relating to call triage times and a review of clinical codes applied to calls in some ambulance trusts response data was not comparable across all the 11 ambulance trusts in England. From July 2016 when the England average performance became based on eight trusts EMAS had met or exceeded the England average. The most recent data from December 2016 the trust had achieved the eight minute response target for 66.3% of the Red 1 calls, this compared to the performance across the eight trusts of 52.5% to 67.4%.
- From July 2016 to December 2016 EMAS was between 2.6% and 7.4% below the England average performance for Red 2 calls. From July to December 2016 they were between 4.1% and 7.5% below the England average performance for A19 calls. The England average performance however was between 2.6% and 7.3% below the national standard throughout 2016.
- The trust monitored divisional performance against the national standards. From April to December 2016 no division met the national response targets for Red 2 or A19 calls. The Red 1 national response target of 75% of calls responded to within eight minutes was met by two divisions in August 2016. In all months other than this no divisions met the Red 1 response target.
- The trust emergency services were commissioned by a lead clinical commissioning group (CCG) on behalf of a further 21 CCGs across the East Midlands region.
 Performance response targets had been set as part of

the contract and these were lower than the national response targets for Red 1, Red 2 calls and the A19 standard. Each division had different targets to meet to fulfil their contractual obligations.

- The CCG contract also set the response times for calls where there was no immediate risk to life, these were known as green calls and were categorised into four levels depending on their degree of urgency. Green 1 and Green 2 (G1 and G2) calls were the most serious conditions but not immediately serious or life-threatening, but urgently required a face to face response. Green 3 and Green 4 (G3 and G4) were non-life-threatening conditions which required a telephone clinical assessment by a paramedic or nurse. This was known as see and treat, where patients were provided with professional advice and where appropriate, referred to another health care professional or service.
- The locally agreed response time for G1 and G2 calls was 30 minutes, for G3 calls a call back within 20 minutes and for G4 it was a call back to be completed within an hour. The trust's performance for G4 telephone response met their commissioned target of 85% of calls being made within 60 minutes in all divisions from April 2016 to December 2016.
- The trust failed to meet the target of 85% of G2 calls receiving a response within 30 minutes in any division from April 2016 to December 2016. Data supplied by the trust showed deterioration in performance for G1 and G2 calls from April 2016 to December 2016 across all divisions and deterioration in performance for G1 and G2 calls when compared to the trust's performance in 2015. The trust told us the increasing number of calls categorised as Red impacted on their ability to respond to Green calls.
- Health care professionals for example GPs, community nursing teams and hospital staff could request EMAS services to carry out patient admissions and transfer between hospital sites and to other hospitals both within and outside the East Midlands region.
- EMAS provided vehicles to transfer critically ill adults and children from one location to another. The urgency of these requests was determined by the health care professional organising the transfer.
- There was an expectation that within 30 minutes of arriving at a hospital emergency department the crew would have handed over the patient prepared the vehicle and be ready to accept the next call. As on the

previous inspection we observed crews being delayed at acute trust emergency departments while they waited to handover the patient to a member of acute trust staff.

- In Leicestershire we saw patients had to wait in the ambulance they had been conveyed in until there was room in the emergency department for them to be taken inside. In January 2017 the trust reported over the previous 18 months it had experienced increasing pressures around delayed handovers at a number of the hospitals in the East Midlands region. There had been deterioration in handover turnaround times from October to December 2016 and at some hospitals this had deteriorated further into January 2017.
- The trust highlighted three emergency departments where during December 2016 a total of 3,710 EMAS front line staff hours were lost. EMAS crews had visited the departments on 12,074 occasions to covey patients and were delayed by more than 15 minutes on 2,302 of those visits. The majority 2259 (98%) were delays of up to an hour, however on 23 (1%) occasions delays had been over four hours. Whilst crews were delayed at hospital they were then not available to respond to emergency calls from other patients in the community.

Pain relief

- We observed patients being assessed for signs of pain and discomfort. A numerical scale was used to assess the severity of pain; this enabled the staff to make a clinical decision as to which type of pain relief was the most suitable.
- Patient group directives(PGDs) were in place for a arrange of pain relief medicines, these included tablets for example paracetamol for the less severe pain and very strong pain relief for example morphine which was prescribed and administered for more severe pain. PGD provide a legal framework which allow some registered health professionals to supply and administer specified medicines to a pre-defined group of patients, without them having to see a doctor.
- Paracetamol was also available to be given intravenously were a patient's condition made it unsuitable or impossible for them to take oral medicines. Under the PGD, Entonox gas was available for the crews to prescribe and administer. This gas was inhaled and provided sedation and pain relief.
- Stronger pain relief for example morphine could only be prescribed and administered by a paramedic. We

observed one patient who had fallen being effectively assessed for their severity of pain using a numerical pain scale. Pain relief medications were recorded on the patient report forms, and we observed the information about what pain relief a patient had been given handed over to the staff in the emergency department.

• Patients pain levels were re assessed following the administration of pain relief medicines. This was to ensure the pain relief had been effective.

Patient outcomes

- Patient clinical outcomes were monitored as part of the NHS England's Ambulance Quality Indicators. Data was provided by all eleven NHS ambulance services. The trust's clinical audit department collected and analysed patient data and submitted a monthly report on patient outcomes.
- Outcomes were monitored for patients who have suffered a cardiac arrest, specifically whether circulation was re-established and whether they recovered sufficiently to be discharged from hospital. National data was also collated for patients following a stroke, specifically whether they received the appropriate initial care and were conveyed to a specialist stroke unit within an hour of seeking help.
- The third outcome was for patients who had suffered a heart attack. This monitored if patients had received all the appropriate initial treatment and were conveyed within 150 minutes, to a hospital providing specialist cardiac care to unblock arteries in the heart.
- From January to September 2016 EMAS performed in line with, and for the majority of the time better than, the England average for providing initial care for patients suffering a stroke or heart attack.
- From January to September 2016 EMAS cared for 251 patients who had been witnessed to have collapsed and required resuscitation. Of these patients 111 (44.2%) had their circulation restored by the resuscitation they had received at the time they were admitted to hospital. This performance was worse than the average performance of 51.2% across all 11 ambulance trusts during the same period.
- There was a planned programme for service monitoring and clinical audit. Local audits were informed by numerous factors including patient safety incidents, patient complaints and reviewing changes to practice.

- Audits included a review of compliance to evidenced based care bundles, including the care of patients who had received care for a suspected fractured neck of their femur bone and for patients with chronic obstructive airways disease. Care bundles are a documented set of evidence based practices which have been proven to improve patient health outcomes.
- There was evidence in clinical governance meeting minutes where clinical audit data had been used to inform the group on how staff were recording specific observations on the patient record forms. The group then made an informed decision on the actions required to address an area of low compliance.
- Patient outcome data was used to improve the service.
 In Northamptonshire, we spoke with staff who were aware of the outcomes of patients who had required resuscitation within their area, and were proud of the care they had delivered. Patient outcome data was displayed in stations.
- The number of patients who re-contacted a service within 24 hours of their initial call can be an indication of whether the advice or care they received was appropriate. From August 2015 to November 2016, the proportion of patients who re-contacted the service following treatment and discharge at the scene, within 24 hours was consistently better than the England average. From January to August 2016 the trust's performance showed a trend of improvement. However in November 2016 there was a sharp increase in the trust's re-contact rate, although this still remained better than the England average

Competent staff

- Following the 2015 inspection the trust were issued with a warning notice and a requirement notice which informed them of the need to ensure staff received appropriate training, supervision and appraisal to enable them to carry out their duties. Low competition rates for non-mandatory training and low appraisal completion rates were highlighted in the report.
- At this inspection we found the trust had taken action to ensure more annual appraisals were completed and staff received training to support them in their role. Staff appraisal completion rates were now closely monitored at both divisional and trust level. The risk of service demand affecting the availability of senior staff to complete appraisals was highlighted and managed across all divisions.

- Various control measures had been put in place, these included additional staff being trained to conduct appraisals. As of January 2017 appraisal rates had improved since our previous inspection. Completed appraisal rates were 62.7% in Lincolnshire, 72.7% in Northamptonshire, 78% in Nottinghamshire, 79.5% in Derbyshire and 81% in Leicestershire.
- The majority of staff who were asked had completed their annual appraisal or had it arranged for the next couple of months. The majority of staff felt the appraisal process had been improved.
- There were some staff who felt their appraisal had been a tick box exercise but these were in the minority. In one division team leaders and clinical team mentors (CTMs) carried out staff appraisals, where it was more of a team approach, with staff across four stations being appraised by any of the team leaders covering those stations.
- There were some variations across the divisions on how the appraisal process was completed. In divisions where the appraisal was incorporated into a shift and staff spent a day working alongside a clinical team mentor this was seen as a very positive experience. Clinical team mentors (CTMs) explained they planned their shifts to work with their staff who were due an appraisal and they felt this approach worked well. There were several concerns raised about the new operational structure reducing the number of CTMs and how this could prevent this approach being continued.
- The trust's clinical supervision policy set out how clinical supervision was part of an annual supervision process for clinical staff. Staff we spoke with explained they were accompanied once a year by a CTM and this part of their annual appraisal and performance review. There was an opportunity during the day to reflect on clinical practice. Where required the supervisor could increase the frequency of the clinical supervision sessions based on the supervisee's individual needs. Additional clinical supervision could be required for staff returning from a period of prolonged absence. Clinical team mentors and team leaders were clinical supervisors for front line staff. Data provided by the trust showed 46.5% of these staff had completed the leading a team module and 39.5% the managing a team module of the EMAS supervisor training.
- The access to training had improved since our previous inspection. All staff felt training was now given a much higher priority. Some training was now delivered locally

rather than just at the main training centres and this made it more accessible to front line staff. Training was delivered via face to face and via on line learning packages. Staff were able to access the training pages of the intranet from any computer.

- Front line crews and CTMs explained continuous professional development (CPD) sessions were now provided. These were hosted by the CTMs and team leaders. These were clinical based training sessions and subjects had included cardiac care, trauma care and care of the elderly patient. Guest speakers delivered some of the training. We saw future sessions advertised at stations and staff spoke positively about sessions they had attended.
- Staff attended some of the CPD sessions in their own time but most staff who we spoke with felt having these training sessions available was really positive. The CTMs we spoke with were motivated to deliver the training and reported attendance rates were good.
- Paramedics who were required to evidence continual professional development to support their two yearly registration process with the Health and Care Professional Council (HCPC) had used attendance at these sessions to evidence their professional development.
- Front line staff felt they had good access to an immediate manager, and felt they could contact any CTM or team leader for support or advice if their own local CTM or team leader wasn't available. Staff reported seeing very little of any more senior managers and would associate their arrival on station with a problem or concern being investigated.
- The trust provided an accredited training programme for technicians. This could be accessed by candidates completely new to the profession or as part of career progression for staff in the emergency care assistant role. Training comprised of classroom training sessions with theory and practical assessments. On successful completion of these assessments new technicians were supervised for 750 hours of clinical practice and completed of a portfolio of evidence in support of their experience. During this time there were three points where their progress was reviewed by a CTM. A final review on successful completion of the portfolio was carried out and the technician was signed off as competent to practice.
- There had been a short period of time where the trust offered an un accredited technician course. Staff who

had completed this were now able to complete additional practical based workbook to obtain accreditation for their course qualification and for it to be recognised as meeting the criteria for higher level professional studies and qualification.

- Technicians we spoke with felt the training they had completed was comprehensive and they had been supported during the 750 hours supervised practice. Newly qualified technicians were concerned they had very little opportunity to consolidate their learning following qualification and were part of a two man crew with an unqualified member of staff very soon after qualification. Experienced front line staff also raised this as concern and similar concerns for newly qualified paramedics who joined the service. Trust policy required paramedics to have six months experience before being a solo responder and this was due to be extended to 12 months.
- The trust had close working relationships with two universities who delivered the paramedic training course. Student paramedics completed their practical training hours working alongside trust staff. Student paramedics were assigned a mentor to support them during their placement. Staff explained there was a shortage of mentors in some areas, however other staff explained they had expressed an interest in becoming a mentor which had not been progressed.
- We visited the trust's training facility in Leicestershire, training was delivered using equipment that was used by front line staff, training was interactive and we saw students completing group work and others were off site learning casualty extraction techniques with the fire and rescue service.
- From May 2016 leadership training courses had been available for managers. A skills gap analysis had been carried out to identify manager training needs to ensure they were equipped with the skills for their role. We spoke with managers who confirmed they had received additional training relevant to their role. Not all senior staff had received training, but those who had not received support from their colleagues where required.
- No formal training was provided for staff specific to the team leader's role as hospital ambulance liaison officer (HALO) and this was where less experienced staff relied on their colleagues for support. Staff working in this role

explained they learnt on the job. A HALO worked with ambulance crews and hospital staff to facilitate the timely and safe handover of patients to the hospital staff.

- A new training package had been developed to support staff care for patients with mental health illnesses and the trust had begun delivering this to staff in September 2016 with a two year programme for all front line staff to be trained over two years. Staff who had completed this training all gave positive feedback on the content of the course and its relevance to their role, staff spoke of feeling more confident to help patients with mental health illnesses. Current completion rates reflected the guite recent commencement of the training. Completion rates as of the end of October 2016 were 28.8% against a trust target of 20%. Feedback from the initial courses had led to changes in the programme with training due to be delivered over a shorter face to face training session and supported by an e learning package.
 - The trust's driving policy set out the initial and refresher driver training requirements for staff who drove emergency response vehicles. All staff who drove under emergency conditions were required to complete an emergency driving course. Staff we asked had completed this course. The requirement for refresher training was triggered by driving incidents for example a road traffic collision. A re-assessment was then completed by a trust driving assessor. The trust had a standard procedure for managing incidents involving trust vehicles.
 - Staff had varying opinions on the career progression opportunities within the trust. We spoke with staff who had progressed through the career structure and were in senior managerial positions, we also spoke with unqualified staff who had been unsuccessful in their application to become a technician.
- Training centre staff explained support was available to employees who may not currently hold the general education entry requirements they needed to access technician training. They also explained the accredited technician course was also aligned with the higher education programmes for paramedic training and this should help technicians who wanted to progress further to access paramedic training.
- For front line staff who wanted greater involvement in staff training there were some opportunities to become an associate tutor where staff remained part of the front

line workforce but spent a proportion of their time delivering training to staff. This enabled training to remain current and meet the needs of the front line workforce.

- In 2015 we found some front line staff had not received training to equip them for their roles in a major incident and some managers who took a lead role in responding to major incidents or high levels of service demand had not received training. Data provided by the trust reported 89% of front line staff had completed an e learning training package provided by National Ambulance Resilience Unit (NARU). Staff had also been provided with major incident action cards and staff who were asked had these available to use.
- Trust data recorded from April to December 2016 EMAS had participated in 34 multi-agency major incident practice exercises. A total of 191 staff across all five divisions had been involved in the exercises.

Coordination with other providers

- EMAS had a coordinated approach to delivering their services to patients throughout the East Midlands. There were established protocols which demonstrated how they had and would work with other health providers and other agencies. Care pathways for patients with specific clinical needs were in place enabling direct conveyance to other provider's specialist services.
- Trust policies had been developed in conjunction with other providers to ensure patients were treated in a way which would achieve best outcomes. The trust's 2016 stroke care procedure had been developed in conjunction with East Midlands clinical advisory group for stroke which included representation from all stroke facilities within the East Midlands. The trust's management of obstetric emergencies policy had been developed in conjunction with the regional clinical network (maternity care).
- A clinical team mentor explained how they worked with a local trust and reviewed patient outcomes following their admission to a specialist heart centre. Feedback was obtained from the hospital and this enabled front line staff to continually improve the care they delivered.
- Another provider had delivered training for EMAS staff on the care of older people with frailty and this had led to ongoing direct communication between EMAS staff and senior specialist clinicians. Front line crews explained this had been a really positive for both staff

and patients. Training was also delivered in conjunction with the fire and rescue service, this enabled staff to participate in safe but realistic road traffic collision training exercises.

- EMAS commissioned two independent ambulance providers to provide emergency services when they were unable to meet the demands placed on the service with their own resources. To ensure the quality and safety of these services EMAS completed audits of the services and monitored their performance using patient feedback. We reviewed the most recent audits for both providers and saw actions identified where required.
- Sustainability and transformation plans (STP) are five year plans developed by the NHS and local authorities working together. They focus on improved integration of health and social care services ensuring services meet local need. The current plans were from October 2016 to March 2021. Senior representatives from EMAS attended eight STP meetings throughout the East Midlands and worked in collaboration with partner agencies ensuring the ambulance perspective was included in the local plans.
- A debrief report following a major incident provided a record of how EMAS had worked alongside other providers including acute trusts, the police and the fire service in their response to and management of a serious road traffic collision in Northamptonshire in July 2016. Feedback had been received from partner agencies and learning from the incident had been shared.
- EMAS worked in cooperation with other providers and other agencies as part of their commitment to improving the quality of and providing care for patients in mental health crisis. A mental health crisis is where a person with mental health problems urgently needs help because of their suicidal behaviour, panic attacks or extreme anxiety, psychotic episodes, or behaviour that seems out of control or irrational and likely to put the person (or other people) in danger. The trust's new regional mental health conveyance policy set out working with the police to ensure appropriate and safe conveyance of patients requiring mental health care. The effectiveness of this policy was monitored externally by the each region's partnership board.
- In conjunction with other providers and partner agencies EMAS had signed the crisis care concordat for mental health in all the East Midland counties, an agreement declaring their commitment to improving

the quality of NHS emergency response to patients in mental health crisis. Some divisions delivered mental health services in conjunction with other providers for example a specialist mental health nurse and a paramedic responding in one vehicle.

- In the Braunstone area of Leicester, EMAS was part of a two year collaborative project with fire and police services to help patients look after themselves and choose the right service therefore reducing calls to emergency services. The project included home visits allowing time in the community to talk about safety, wellbeing and security. GPs and schools were key partners to the project. This project was known locally as Braunstone Blues.
- In Derbyshire, there was a coordinated approach to reaching patients in remote locations with EMAS working with the mountain rescue services. In Lincolnshire, there were several collaborative working initiatives. The Joint Ambulance Conveyance Project pilot with Lincolnshire Fire and Rescue Service built on Lincolnshire Fire and Rescue's existing co-responder scheme where on-call firefighters, respond to medical emergencies and delivered initial care. The fire and rescue staff attended in an ambulance. EMAS also responded and where conveyance was required the ambulance on scene could be used saving time.
- EMAS worked in collaboration with other emergency service partners in Leicestershire on the Blue Light Collaboration Programme. The programme enabled the services to work more closely together to deliver a better service to the local community. Part of the program had reviewed buildings and estates to identify opportunities for co locating services which enabled closer partnership working.
- EMAS was part of the national memorandum of understanding which existed between all NHS ambulance trusts to provide mutual aid between services in the event of a major or catastrophic incident. The memorandum of understanding provided a framework to ensure emergency preparedness, including support between ambulance trusts.
- EMAS worked with community first responders who were trained volunteers able to attend in an emergency to provide initial care before the arrival of an ambulance. They were asked to attend emergencies by the EMAS emergency operations centres often when emergencies were in remote locations.

Multidisciplinary working

- EMAS staff were observed working well with other health professionals. We observed a crew caring for a patient who had become unwell in a nursing home. There was effective communication between the care staff, the paramedic and the technicians who cared for the patient and conveyed the patient to the local emergency department. This ensured all staff were aware of the patient's previous medical history and care staff were able to update the patient's family on the patient's current condition.
- We observed good team working between EMAS and other providers during the handover of patients at emergency departments throughout the East Midlands. One handover we observed took place while a patient received resuscitation for a cardiac arrest; this handover was very well managed. We observed EMAS staff working effectively with a patient's GP and community psychiatric nurse and the wider mental health team during their care of a patient in Leicestershire.
- We were told by the crews how they were able to seek advice and support from social services and community nursing teams. Staff were aware of how to contact other health professionals for example community nursing services, who provided nursing care and support to patients in their own home to help keep them out of hospital.
- In the Nottingham city area EMAS were part of an emergency falls response team that responded to emergency calls where patients had fallen. A paramedic worked alongside an assistant practitioner who was a specialist in falls prevention and mobility and this provided multidisciplinary approach to the falls service.
- There was a multidisciplinary approach to managing handover delays at emergency departments. There was on going and regular communication between EMAS and the acute trusts both at board level and operational level. Senior EMAS staff had been involved in the development of the acute trust's standard operating procedures for the safe management of patients during handover delays. The operating procedures set out a multidisciplinary approach to managing the delays, with nursing and medical staff from the acute trusts working with EMAS clinicians.
- Ambulance staff were expected to take no more than 15 minutes from arriving at the hospital to handover the care of the patient to another health care professional.

Within 30 minutes of arriving they should be ready to respond to another call. EMAS worked with acute trusts across the East Midlands region to minimise the number and length of handover delays.

- In the Leicester, Leicestershire and Rutland area there had been significant and sustained delays in EMAS being able to hand over patients, additional collaborative actions had been put in place to help address this. During our inspection we observed crews being delayed in handing over patients to the emergency department staff. A team leader acting as a hospital ambulance liaison officer (HALO) was present at the emergency department and we observed communication between acute trust staff and the HALO during our inspection. However communication centred on all parties being updated on the current position of the handover delays and the number of patients waiting and we did not observe any actions taken by the HALO to minimise the actual delays. The trust had provided a third party ambulance crew to support patient management and a senior member of EMAS had attended a strategic meeting with the trust to discuss joint responses to the delays.
- When significant handover delays occurred EMAS contacted the hospital's senior manager and executive on call and alerted them to the extent of the handover delays. EMAS HALOs were deployed to local trusts to assist in the management of handover delays, and where required a more senior manager would also attend.
- We spoke with EMAS staff who would be deployed to the role of HALO if handover delays occurred. Staff were clear on their purpose in the role, but told us of variation in practise, however there were limited opportunities to see the effectiveness of the role as in most divisions there were few handover delays at the time of the inspection.
- EMAS executives had attended the accident and emergency delivery board meetings. This was to ensure the impact of handover delays was clearly understood and to work with other providers to implement actions to minimise the number and impact of delays. There was close monitoring of handover delays with daily reports being produced, this enabled the trust to see emergency departments which were have sustained periods of significant delays. Monthly meetings were taking place with acute trusts

- The EMAS on scene conveyance and referral procedure (December 2016) provided support to clinicians and the expected standards required of them when determining the most appropriate conveyance or referral options for a patient. Some patients could be assessed and treated by a qualified member of staff at the scene without the need for conveyance to hospital. These are known as 'see and treat.'
- Staff had access to the contact details and referral criteria for other health care professionals within their division. Staff felt having local knowledge and experience was very valuable and helped to make the referral process easier.

Access to information

- The trust produced a weekly staff electronic newsletter which included up to date trust news, clinical updates, and an update from the chief executive. Staff we asked were able to access the newsletter. Current trust policies were also available via the trust intranet, staff had a secure log in which enabled access from any computer.
- All stations had several notice boards which contained information displayed for staff which had been printed off the intranet. Information included clinical bulletins, scheduled training events, trust performance data and updates on incidents from across the trust. Some of the information was not current, infection prevention and control information referred to audits which had taken place during October to December 2015.
- Although the information boards were generally tidy staff felt they contained too much therefore it was difficult to keep informed and up to date about everything. Managers and team leaders explained there were no trust wide procedures in place for recording if staff had received, read and understood any information they were received. In one station, we saw a list of staff signatures was to be obtained to acknowledge receipt of a new aid memoire. In another station, a team leader kept recent publications in a separate file so staff knew where to look for new updates.
- We saw information displayed in vehicles, this included copies of the national early warning scoring tool and a copy of the flow chart of the steps a clinician was required to complete to carry out a mental capacity assessment on a patient.
- Current policies for example on stroke care policy and emergency maternity care policy contained direct

contact details for the services providing the specialist care. Staff also had access to service directories for their local areas providing contact details for local services including GPs.

- Satellite navigation systems on the vehicles were updated as part of the fleet maintenance programme. Staff explained on occasions where they were unable to use the vehicle navigation system to find an address they would use the internet, re contact the emergency operations centre (EOC) or if appropriate use their local knowledge.
- In Leicestershire, staff had been provided with a work mobile phone, this had been well received by staff who felt it had improved their access to information as remote workers. One member of staff explained not all applications were available on the EMAS phones and they would have access to additional information for example the Joint Emergency Services Interoperability Programme (JESIP) via their own mobile phones.
- Information from the EOC was relayed to front line crews via the vehicles mobile data system, this enabled the crews to receive current operational information on the calls they were responding to. We observed crews use the system to receive updated information whilst on route to a call; the EOC provided an update on the patient's condition.
- The clinical assessment team were based in the EOC and crews were able to contact the team for advice and support whilst they were on location with a patient. The crews we asked felt they had good access to the CAT team.
- Computer records of location addresses were held by the trust. This enabled notes to be attached to addresses where there was important additional information relevant for the crews who may attend. Notes were made to highlight important information obtained during previous calls. This information could be used to alert crews to potential health and safety concerns or about a particular difficult access to a property. Where medical information was held on the trust system crews were aware this may not be up to date or relevant to the current call.
- Crews did not have access to other health professional records or databases for example GP or district nursing notes, unless records had been left at the patient's home. Crews explained they relied on patients or their families providing details of relevant medical history. Where crews were advised of patient's wishes not to

receive treatment crews ensured this information was already documented and relevant to current circumstances. In an emergency situation crews explained they would always perform resuscitation until a documented do not attempt cardiopulmonary resuscitation order was produced.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- EMAS staff across all divisions demonstrated a good understanding of the principles of consent. We observed consent being obtained prior to all care being delivered. Patients were provided with sufficient information in a way they would understand which allowed patients to make an informed decision.
- As part of the trust's mental health strategy, training had been provided in the Mental Capacity Act 2005 and staff who had completed this training felt it had helped them have a better understanding of when they would need to formally assess the mental capacity of a patient. Staff spoke of making decisions in the best interest of the patients where their condition prevented the patient making the decision for themselves.
- Some staff demonstrated their understanding of patients making unwise decisions and gave an example of where patients had refused to be taken into hospital.
 When patients made their own decision to stay at home where possible a signature was obtained to confirm this was their decision.
- Reference material was displayed in the vehicles to assist staff with the process of assessing mental

capacity. There were varying degrees of knowledge amongst staff on the details of the two stage test required to assess mental capacity. However, staff had access to documented procedures and more senior staff for support if required.

• The trust's training programme for front line staff also covered safe holding techniques, staff explained how the training had been relevant to them conveying patients and had explained what would be considered as restraint.

Are emergency and urgent care services caring? Good

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

Are emergency and urgent care services well-led?

Requires improvement

Good

| Safe | Requires improvement | |
|------------|-----------------------------|--|
| Effective | Requires improvement | |
| Caring | Good | |
| Responsive | Good | |
| Well-led | Good | |
| Overall | Requires improvement | |

Information about the service

East Midlands Ambulance Service NHS Trust serves a population of 4.8million across the East Midlands (Derbyshire, Leicestershire, Lincolnshire including North and North East Lincolnshire, Northamptonshire, Nottinghamshire and Rutland), covering 6,425 square miles. Between December 2015 and November 2016, the trust received 939,499 emergency and urgent calls. Of these 659,480 calls resulted in an ambulance attending the scene of the incident.

The Emergency Operations Centre (EOC) receives and triages 999 calls from members of the public and other emergency services. It provides advice and dispatches ambulances to the scene as appropriate. As of November 2016 the trust employed over 325 staff in its two emergency operations centres, located in Lincoln and Nottingham. The EOC provides assessment and treatment advice to callers who do not need an ambulance response, a service known as 'hear and treat'. Staff give callers advice on self-care, making an appointment for a general practitioner (GP) or directed them to other services. The EOC also manages requests by health care professionals to convey people either between hospitals or from the community into hospital.

The trust has two emergency operations centres (EOC). One in Lincoln and a larger EOC at trust headquarters in Nottingham. The two EOC's work as one virtual EOC and all calls are routed to the next available operator across the two centres. Clinicians work at both EOCs triaging lower priority calls and providing clinical advice to patients. The Lincoln EOC manages emergency calls from Health Care Professionals and GP urgent calls for Lincolnshire. In addition, Lincoln EOC responds to the community first responder (CFR) calls for the whole of the East Midlands area. Nottingham EOC responds to calls for the rest of the East Midlands including the air ambulance service. The incident command desk (the coordinated response for major incidents) is in Nottingham.

We inspected both EOC sites during our visit. We spoke to 33 staff across both sites including emergency medical dispatchers (EMD), dispatch officers, clinicians (including paramedics and nurses), team leaders, duty managers and senior managers.

Summary of findings

This was a follow up focussed inspection and therefore we did not rate the EOC service overall. We found:

- The majority of staff we spoke with at Nottingham EOC did not know how to report incidents. Staff also said they did not receive feedback or hear about learning from incidents.
- At our previous inspection, we asked the trust to consider how all staff understood the duty of candour Regulation. During this inspection, Nottingham EOC staff did not know about the duty of candour or its principles.
- At our previous inspection we saw not all staff had access to or had completed their mandatory training. We saw staff had met mandatory training compliance targets in three out of eight modules. However, the average staff completion rate was 71.4% at the time of our inspection.
- Data showed poor trust performance in call answering response times. Callers were waiting longer for staff to answer their calls. The trust did not meet its own contractual targets regarding calls answered within five seconds.
- The trust demonstrated deteriorating performance in the proportion of calls abandoned before being answered. The trust was not meeting its target for green three calls (requiring telephone assessment within 20 minutes). Performance had deteriorated since our last inspection.
- At our previous inspection, we identified a large number of frequent callers who did not have care plans. We found the trust still had a high number of frequent callers who did not have care plans.

However:

- At our previous inspection, we found staff in EOC did not understand what a serious incident was. We found during this inspection staff knew about what they should report as incidents.
- At our previous inspection, we found there was insufficient numbers of staff with an appropriate skill mix to meet safety standards and national response targets. We saw the trust had responded to our findings and increased staffing levels.

- At our previous inspection we identified the trust should evaluate the effectiveness of single piece ear sets issued to staff at Lincoln EOC. The trust had conducted a review with staff and made two-piece headsets available for those staff requiring them.
- At our previous inspection, we found there were insufficient numbers of staff with an appropriate skill mix to meet safety standards and national response targets. We saw the trust had increased staffing and establishment levels.
- Staff used up to date evidenced-based electronic systems to assess and prioritise emergency calls.
 Staff used these systems to give advice to callers on resuscitation, dispatch resources or gain further medical information.
- The trust had positive hear and treat rates and demonstrated continuous improvements in the proportion of patients who re-contacted the service (following discharge by telephone) within 24 hours.
- All staff we spoke with said they had received a meaningful appraisal in the last year. The trust's overall appraisal completion rate stood at 76% at January 2017.
- At the last inspection, we highlighted the trust should consider training for staff in the management of patients with a mental health problem and child callers. In September 2016, the trust began rolling out a mental health training programme. The trust rolled out child caller training in October 2016.

Is emergency operations centre safe?

Requires improvement

ment

We rated safe as requires improvement because:

- The majority of staff we spoke with at Nottingham EOC did not know how to report an incident..
- Despite managers having processes to feedback and share learning on incidents, staff at Nottingham EOC said they received little or no feedback from incidents. In addition, 14 out of 15 members of staff could not tell us any learning shared from incidents.
- Staff did not know about the duty of candour or its principles.
- At our previous inspection we saw not all staff had access to or had completed their mandatory training. We saw staff had met mandatory training compliance targets in three out of eight modules. The average staff completion rate was 71.4%.
- At our previous inspection, we saw staff faced challenges in allocating resources at times due to hospital handover delays. We saw on inspection and from data provided by the trust this was still an issue at times.

However:

- At our previous inspection, we found some staff did not know what constituted a reportable incident. Staff knowledge of what constituted an incident had improved.
- At our previous inspection we identified the trust should evaluate the effectiveness of single piece ear sets issued to staff at Lincoln EOC. The trust had conducted a review with staff and made two-piece headsets available for those staff requiring them.
- At our previous inspection, we found there was insufficient numbers of staff with an appropriate skill mix to meet safety standards and national response targets. We saw the trust had responded to our findings and increased staffing levels.
- Managers investigated incidents in accordance with trust policy. Incident investigations were thorough and managers identified learning and actions.

- Almost 90% of staff had completed safeguarding training and the trust was in line to meet their 90% target by March 2017. Staff knew how to report safeguarding concerns.
- Staff gave medicines advice based on evidence based software and national guidelines.
- Staff used up to date electronic systems to assess and prioritise emergency calls. Staff used these systems to give advice to callers on resuscitation, dispatch resources or gain further medical information.
- Staff had resources, policies and procedures to follow in the event of major incidents.

Incidents

- Never Events are serious incidents that are wholly preventable, where guidance or safety recommendations that provide strong systemic protective barriers are available at a national level, and should have been implemented by all healthcare providers. Between January and December 2016, the trust reported no incidents classed as never events.
- The trust reported a similar number of incidents to other ambulance trusts but reported less death, severe and moderate incidents and many more no harm incidents The Emergency Operations Centre (EOC) reported 315 incidents between June 2016 and November 2016. This figure also included incidents related to the clinical assessment team (CAT). We looked at this sample to look at the types of incidents staff reported. Holding calls and delayed responses due to capacity issues were the most reported issues and accounted for 68 (21.4%) of incidents reported. There were no other trends in reporting identified.
- A Serious Incident is any incident (or series of incidents) that prevents, or threatens to prevent, an organisation's ability to continue to deliver an acceptable quality of service. Between November 2015 and October 2016 the EOC reported 22 serious incidents. Lack of resource was a primary factor in 13 of the incidents and a contributing factor in three more. Lack of resource meant no ambulances available to respond. The reasons provided were hospital handover delays and peaks of unprecedented demand.
- The service had processes and systems for investigating incidents. The EOC management team reviewed and discussed incidents. We reviewed 18 serious incident investigations. We saw detailed reviews of incidents and managers listened to calls where appropriate. Managers

conducted a root cause analysis (RCA) in which learning for both individuals and the organisation was established. Investigations had recommendations and action plans. We saw actions followed up and monitored on a monthly basis. For example, we noted an action in one incident report to implement help and support cards in the EOC and we saw this had taken place and the cards were available to staff at both EOCs. The board received regular updates on incidents as part of the investigation and review process.

- The trust had incident reporting procedures. There were four ways for staff to report incidents: paper forms, electronic forms on the trust intranet, a direct telephone line to the safeguarding team or by informing a line manager or team leader. This meant incident reporting was flexible to suit the needs of staff.
- At our previous inspection, we found some staff did not know what constituted a reportable incident. From talking to staff, reviewing incident reports and types of incidents reported staff knew what constituted an incident.
- However, staff in the Nottingham EOC did not know how to report incidents. Fourteen out of 15 staff we spoke said they did not know the incident reporting procedure. This presented a risk of either staff not reporting incidents in line with trust policy or not reporting incidents at all.
- The trust had processes to share learning and feedback from incidents. For example, managers posted learning from incidents in staff bulletins. However, the majority of staff we spoke with could not describe learning resulting from investigations and complaints. Most staff said they received little or no feedback from incidents. This would suggest feedback mechanisms were ineffective.
- Joint reviews of incidents with partner organisations such as other trusts, the police and fire services took place. There was a lead person and organisation to coordinate the investigation. Investigations were comprehensive with clear actions and learning identified in all cases.
- The duty of candour is a regulatory duty relating to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of 'certain notifiable safety incidents' and provide reasonable support to that person. We saw from incident investigations incident investigators had involved patients and their families through the investigation process. However, when

asked, staff in the Nottingham EOC did not know what the duty of candour was. Fourteen out of 15 members of staff could not describe the principles of the duty of candour.

Mandatory training

- Staff knew mandatory training in the trust as essential education. Staff received mandatory training delivered on a three-year rolling programme. In year one, staff received all ten modules of essential education which included infection control, conflict resolution, information governance, and safeguarding. In the following two years, managers chose individual topics depending on need, or the regularity of the delivery of the subject. New members of staff covered all eight modules during their induction period.
- At our previous inspection, we saw the trust did not meet its target for 95% of all staff completing mandatory training. In response, the trust set targets for each training module for staff in the Emergency Operations Centre for the period from April 2016 to March 2017. As of January 2017, EOC had met targets for two of the eight mandatory training modules across the service. These were resuscitation and conflict resolution (including mental health). The trust had introduced mental health training in September 2016. The average completion rate across all modules was 71.4% (excluding mental health as it had begun in September 2016). Trust data showed they were in line to meet or be within 10% of their targets for five mandatory training modules by March 2017.
- Managers delivered mandatory training by using conversation cards. Conversation cards were a set of questions or topics managers discussed with staff in a one-to-one or group situation. There was a conversation card for each of the ten mandatory training categories. This format meant managers could deliver training in an informal and flexible way.
- The National Ambulance Resilience Unit (NARU) works with ambulance trusts to support the development of properly trained, equipped and prepared ambulance responders to deal with hazardous or difficult situations. Staff received training which met NARU standards. The duty manger on each shift had received NARU approved training so there was at least one manager trained to support staff in dealing with difficult situations.

Safeguarding

- All staff received safeguarding level two training as part of their induction. Staff knew how to handle a safeguarding call. The trust repeated safeguarding training every three years as part of the essential education programme. The trust set a target for 90% of staff to have completed mandatory safeguarding training between April and November 2016. EOC had almost met this target with 89.8% of staff having completed the training. It was likely EOC would meet the target by the end of March 2017.
- The Nottingham based safeguarding team provided a 24-hour direct telephone referral service. Staff made safeguarding referrals using a direct line, which followed the safeguarding policy. Staff asked for support from their line manager appropriately.
- Staff in the EOC did not have direct access to child protection registers. Having direct access to child protection registers enables health care providers to check whether children have already been subject to safeguarding procedures. They told us if they had any concerns they would discuss the case with the clinical assessment team or the safeguarding team.
- There were safeguarding reporting arrangements with multiple local authorities across the East Midlands.

Cleanliness, infection control and hygiene

- We reviewed the infection, prevention and control (IPC) audit, dated 15 February 2016, for the Nottingham EOC. The overall score was 80% against the trust target of 95%. The audit highlighted several unclean areas including the kitchen, toilets and staff changing areas, out of date hand sanitiser and unclean hand get dispensers. The audit did not identify action to rectify the issues. However, in response to the audit the trust conducted a deep clean of the EOC shortly after the audit. Because they had conducted a deep clean, the trust said they did not conduct an IPC audit in December 2016.
- The national specifications for cleanliness in the NHS: A framework for setting and measuring performance outcomes in ambulance trusts (National Patient Safety Agency: February 2008) states the trust do not need to undertake IPC audits in call centres but there should be cleaning schedules which should be adhered to and audited on a regular basis. We saw the trust had cleaning schedules.
- After reviewing the audit data, we saw both EOCs, including kitchen and toilets, appeared visually clean at

the time of inspection. There was hand gel available and disinfectant wipes were available at workstations. There were notices and information in the EOC bulletin, the toilets and the kitchen providing guidance on infection prevention, control and hand hygiene.

- Staff received infection prevention and control training as part of their induction programme. Infection prevention and control training was repeated every three years. Data from November 2016 showed the majority of staff groups exceeded training targets. Training included hand hygiene, sourcing infection control information, return to work after illness and use of food and drink. If EOC staff needed further information about infection prevention and control, they could contact the infection prevention and control team.
- The service had processes for identifying and passing on infection control risks to crews and hospitals. We observed EMD staff asking callers if they knew of any known infections or contagious diseases affecting the patient. Staff recorded details and recorded on the patient's electronic record if the answer was yes. The information was then visible to the dispatch officer who would pass it to the ambulance staff attending the scene. The clinical assessment team (CAT), a team of clinicians who provided clinical advice and support to staff and patients, could make other health providers aware.
- Staff had a toolkit providing guidance on what to do in the event of a suspected infection control incident. The infection prevention and control team at the trust provided telephone advice to frontline staff including EOC. Clinical staff knew where to go to get guidance on infection control issues.
- We saw both EOC sites had legionella and water hygiene risk assessments. Managers completed the risk assessments comprehensively and issues identified with actions to address them. The risk assessments were up to date and due for review in 2017.

Environment and equipment

• Staff at both EOCs said there were quiet rooms they could use to go for 'time-out'. There was also a kitchen area with a sofa at Nottingham EOC where staff took breaks away from the control centre. A quiet or separate space is important when staff have been dealing with particularly distressing calls.

- Staff had workstation safety assessments completed via a self-assessment questionnaire every year. The majority of staff had received regular workstation assessments and we saw examples of these. Managers discussed any issues raised on the questionnaire with staff. We saw specially adapted chairs and moveable desks for staff requiring them.
- In the event of workstation equipment failing there were several pre-configured desktop personal computers, which allowed rapid replacement of the faulty equipment. Staff told us they rarely experienced equipment failure. There were systems and procedures to order and replace equipment. There was a capital-funded programme of rolling hardware replacement, which provided EOC hardware and replaced information management and technology equipment on a three to five year cycle.
- In the event of equipment and software failure, there were systems and processes to ensure the service could continue to operate. If the computer aided dispatch (CAD) system failed, for example, crews would still receive information via telephone and radio. EOC staff performed monthly 'takedowns' without the use of computer systems to ensure the service could still continue. Takedowns were when the service operated without electronic systems to test back-up systems worked. Staff used fallback papers (job sheets) which contained all the necessary information required for each call.
- At our previous inspection we identified the trust should evaluate the effectiveness of single piece ear sets issued to staff at Lincoln EOC. The trust conducted a review with staff. Staff did not have a problem with single piece headset but the trust made two-piece headsets available for those staff requiring them.
- When new updates for computer software were introduced all staff received briefings and training on new equipment and assessment systems, This meant staff could use the latest version of the information systems and equipment they used.
- Dispatchers and EMDs worked to a set of protocols to keep people safe. Managers reviewed and refreshed them on a regular basis. We saw staff had hard copies available to them on their desks and they referred to them when working. In addition, staff used the protocols in the event of an IT systems failure.

- Staff in the clinical assessment team (CAT) gave self-medication advice as recommended by the clinical decision support software. The software supported staff to give the right advice because of regular updates.
- We saw staff in the CAT used Joint Royal College Ambulance Liaison Committee (JRCALC) and British National Formulary (BNF) guidelines for medicines advice. Clinical staff did not give medicines advice about medication prescribed by the patient's GP as there was a risk of it adversely affecting the patient's health.

Records

- All patient records were stored electronically on the Advanced Medical Priority Dispatch System (AMPDS). Computers were password protected.
- The trust delivered information governance training in 2016/17 by workbook. For the period April 2016 to November 2016, 49.7% of staff had completed information governance training against a target of 70% by the end of March 2017.
- All calls were voice recorded which meant calls could be audited later if further information was needed about a call, for example for a complaint or incident investigation.
- Staff used the AMPDS to record the priority and response of calls and the clinical assessment team (CAT) used telephone assessment software (TAS). Both were nationally approved telephone assessment systems and regularly updated to include any evidence-based changes.
- The trust safeguarding team used a clinical computer system used by healthcare professionals. It was a centralised system based on a "one patient, one record" model. The system allowed users to access details about patients and their care records.
- Both assessment systems, AMPDS & TAS had the capability to record special information (special notes) about patients, which could enhance and improve their care pathway. Special information might include, end of life care plans, do not attempt cardio pulmonary resuscitation orders (DNACPR), instructions on how to access/enter property i.e. key safe details, care packages for frequent callers or patients with long-term conditions, and violent patient instructions. The trust was reliant on other health care providers sharing this information. Staff passed special information to operational staff on the road where it existed.

Medicines

Assessing and responding to patient risk

- EOC staff used the Advanced Medical Priority Dispatch System (AMPDS) to assess and prioritise emergency calls. AMPDS prioritised and coded calls based on responses to questions asked by emergency medical dispatchers (EMD). The priority, or coding, of the call determined the risk to the patient and therefore the response sent by dispatchers.
- The AMPDS had several risk assessment tools including, a breathing tool, pulse taking tool, cardiac arrest tool, contractions (pregnancy) tool and stroke tool. The AMPDS system prompted EMDs to ask the caller about patient alertness and breathing. Use of these tools resulted in a more accurate assessment of patient symptoms and in the case of the cardiac arrest tool allowed the EMD to give CPR advice over the phone until operational staff arrived.
- The clinical assessment team (CAT) used Telephone Assessment Software (TAS) to assess lower priority calls. The electronic system automatically transferred calls to the CAT queueing system. The TAS supported the clinician in assessing and deciding on the most appropriate course of action for the caller. This ranged from dispatching an emergency ambulance to providing self-care and medication advice. The TAS queue was visible to the CATs in both the Nottingham and Lincoln EOCs.
- The CAT could use their clinical judgement and the TAS to inform what they needed to do and change the level of priority of calls. We saw CAT staff change coding and the priority of calls appropriately after re-assessing the risk to patients. This meant the service had procedures to re-assess risk and ensure an appropriate response to keep the patient safe.
- During busy periods, the CAT could assess calls without the support of the TAS. More calls could be managed quickly when staff assessed calls without TAS because it shortened the call.
- The CAT conducted welfare calls to check on the condition of the patient while they were waiting for a response during busy periods. We saw examples of staff calling back patients during busy periods.
- Staff described to us what they would do if they received multiple calls from the same location. If a member of staff from a residential home rang about residents affected by the same virus, the EMD would ask to assess the worst affected patient first, which would result in an

appropriate response. If the response resulted in sending an ambulance, staff would warn the crew there were multiple cases at the same address. A second example would be multiple calls from a crowd affected by the same incident. In this case, staff deployed specialist resources along with other emergency services.

- Dispatchers could see the skill set of each member of operational staff. This meant staff with the appropriate skills deployed to the patient, for example highly skilled paramedics did not need to see elderly patients who had fallen without injury, but were not able to get up themselves.
- Dispatchers and crews used special codes to call for help in the face of challenging behaviour and to keep staff safe. This meant crews could talk discreetly and call for help at the scene.

Staffing

- Managers planned staffing by monitoring call trends. Therefore, managers could predict when their busiest periods were and plan staffing accordingly. We saw rotas varied from day to day to match predicted demand.
- At our previous inspection, we found there were insufficient numbers of staff with an appropriate skill mix to meet safety standards and national response targets. In addition, we found insufficient staff in both EOCs to meet planned staffing levels and demand, including at weekends. Staffing levels still provided challenges however, we saw the trust had increased the overall establishment of EOC from 296.74 whole time equivalent (WTE) to 335.70 WTE between February 2016 and February 2017.
- For the same period, the clinical assessment team establishment had increased from 39 WTE to 42 WTE to increase red and green triage capacity. The trust had increased EMD establishment from 89 WTE to 112 WTE and dispatchers from 103 WTE to 114 WTE.
- Data provided by the trust for February 2017 showed actual staffing levels almost met the establishment. There were 323.97 WTE in post against an establishment of 335.7 WTE. Therefore, the overall vacancy rate across the EOC's was 3.5%. The trust had employed more EMDs (120 WTE) than the establishment (112 WTE) due to increased numbers of emergency calls.

- The majority of staff recognised and were positive about increased staffing levels. This demonstrated the trust had responded to our findings and were working to increase staffing levels.
- EOC sickness absence rates for the period December 2015 to November 2016 were generally in line with the NHS and better than the overall average rate for all ambulance NHS trusts. Nottingham EOC had a short-term sickness rate of 2.3% and a long-term sickness rate of 3.7%. Lincoln EOC had a short-term sickness rate of 1.6% and a long-term sickness rate of 4.1%.
- Staff turnover for the period April 2015 to March 2016 was 8.6% (27 staff) more than double the figure for the previous year of 4%.
- The trust had a rota of bank staff, which consisted of staff who used to work for the trust to cover gaps in rotas. Between December 2015 and November 2016, bank and agency staff use varied between 3.7% and 7.8% per month with the higher use being over the summer months of June, July and August. In November 2016, bank and agency staff use was at 4.5%, which was in line with the England average.
- Managers supported staff upon returning to work after long absences. Staff said they received updates on all changes affecting their roles. Managers provided them time to catch up upon their return to work. Managers kept in contact with staff during long term absences on a regular basis as per trust policy.

Anticipated resource and capacity risks

- There were procedures to understand and manage foreseeable risk. The EOC used a capacity management plan (CMP) to assess and respond to changes in demand. The CMP was an operating procedure changing how staff worked for example, shortening EMD scripts, to deal with high demand for the service.
- Every month EOC conducted an exercise where they would operate without electronic systems to understand how the service would work if electronic systems failed.
- There were processes for dispatchers when allocating resources in bad weather. Air ambulance crews, for example, attended incidents in cars rather than helicopters if the weather was too poor to fly. This meant patients could still receive the same level of care and expertise at serious incidents.

- At our previous inspection we saw staff face challenges in allocating resources at times due to hospital handover delays. We saw on inspection and from data provided by the trust this was still an issue. The EOC had procedures for when this occurred and the Regional Operations Manager (ROM) was responsible for coordinating a response to this issue. The ROM produced escalation reports to identify and raise capacity and resource issues across the trust. In addition, during peak times EOC had strategic and tactical commanders on site to assist in the coordination of resources.
- Staff in EOC discussed resource and capacity risks on a daily basis. There were two conference calls daily as well as an additional morning EOC handover. The handover discussed capacity and skill mix of crews, staffing levels and potential service risks. The EOC manager attended divisional meetings to feed back any issues and discuss long-term resource and capacity planning.
- There were restrictions on when helicopters could fly but there was a specialist helicopter able to fly later and/or earlier than other air ambulances. This was available for night-time search and rescue operations.

Response to major incidents

- The EOC had procedures for major incidents. Staff received training on initial operational response (IOR). The IOR training prepared staff in how to respond in the event of a major incident. Data from the trust showed 100% of staff had received this training. However, the trust said staff roles would not change in the event of a major incident.
- The trust told us major incident table top events happened and they had one planned for March 2017. Managers did not invite EMD staff to events as the trust felt their role would not change in a major incident. The trust invited other staff to attend if it was their day off and staff could claim additional hours/overtime payment for attendance. None of the staff we spoke with had attended a table top event. Some staff we spoke with said they had received major incident training between 18 months and two years ago.
- We requested information on staff training in the event of marauding terrorism and firearms attacks. All staff we spoke with said they had not received training in marauding terrorism and firearms. In addition, staff did not have specific instructions regarding what to do if such an incident occurred. The trust said dispatchers

had a list of available crews they could contact in the event of an incident. The trust said the electronic triage system supported staff through any 999 call. Therefore, staff had this information when they needed it and did not require any other information in relation to marauding terrorism and firearms.

- Managers trained in the Joint Emergency Services Interoperability Programme (JESIP). JESIP supported the ambulance service working together with the Police and Fire and Rescue and Services when responding to major multi-agency incidents. All EOC managers had undertaken initial JESIP training.
- The trust used a major incident vehicle. The major incident vehicle was a mobile operations centre manned by managers, EMD and dispatch staff. It could manage and dispatch resources from different sites.
- There was an incident command desk (ICD) at the Nottingham EOC manned by a single member of staff. The role of the incident command desk was to take over and coordinate responses to major incidents so dispatch staff could concentrate on responding to other emergencies across the region. Managers communicated effectively with staff when the ICD took over responses to incidents. The ICD desk was next to the helicopter emergency medical service desk (HEMS) which helped in coordinating an air ambulance response.
- The EOC could dispatch specialist resources in the event of a major incident. The Hazardous Area Response Team (HART) are a specialised team of medical personnel who attend and support serious incidents including firearms incidents, collapsed buildings, exposure to harmful materials, water rescue and flooding. The incident command desk was responsible for dispatching the HART team. Staff identified when to deploy the HART to emergencies by using the dispatch procedures.
- The trust had an emergency preparedness and business continuity procedure, which prepared staff to deal with a range of major incidents. The ambulance service worked closely with the six local resilience forums across the region, each of which included Local Authorities, Police and Fire services. This helped to ensure the service could continue in the event of an incident affecting normal operations.
- The trust had clinical guidelines for major incidents based on national ambulance resilience unit (NARU) command and control guidance. The trust used major

incident cards, which gave detailed instructions on procedures and staff roles. In the event of a major incident, the duty manager would distribute the major incident cards.

- We saw a call taking, aide memoire for staff to use in the event of receiving a call from a terrorist or a member of staff under extreme threat. This included instructions to inform the duty manager immediately of the call who then implemented major incident procedures.
- The AMPDS included a protocol for severe respiratory infection, used in the case of infectious disease such as Ebola. There was also a paper version of this protocol, last used during the H1N1 'swine flu' outbreak.

Is emergency operations centre effective?

Requires improvement

We rated effective as requires improvment because:

- Data showed deteriorating performance in call answering response times. The average time taken to answer a call was worse than the England average. The trust was not meeting its own target of 95% of calls answered within five seconds.
- The trusts 95th and 99th percentile call answering times (calls taken longer to answer) demonstrated deteriorating performance. This meant patients waited longer for staff to answer their calls than most other ambulance trusts.
- The proportion of calls abandoned before staff answered was mostly worse than the England average for the period August 2015 to November 2016.
- The trust was not meeting its target for green three calls (requiring telephone assessment within 20 minutes). Performance had deteriorated since our last inspection.
- At our previous inspection, we identified a large number of frequent callers who did not have care plans. We found the trust still had a high number of frequent callers who did not have care plans.

However:

- Staff used up to date evidenced-based electronic systems to provide care and treatment over the phone. In addition, staff could approach and seek advice from clinicians who had clinical and evidenced-based knowledge and experience.
- Staff had systems and processes to assess and plan care. This included using triage systems, pathways and dispatching specific or specialist resources to assess patients.
- The trust demonstrated continuous improvement in the proportion of patients who contacted the service again (following discharge of care by telephone) within 24 hours. The trust was significantly better than the England average.
- The trusts hear and treat (emergency calls resolved over the phone) rates were better than the England average.
- All staff we spoke with said they had received a meaningful appraisal. At January 2017, the trust reported 76% of staff had received their appraisal. The trust said they were on course to meet the 95% target by the end of March 2017.
- Managers supported staff through one to one or clinical supervisions. Staff said they felt supported by managers and had appropriate access to clinical supervision.
- At the last inspection, we highlighted the trust should consider training for staff in the management of patients with a mental health problem and the mental capacity act (MCA). In September 2016, the trust began rolling out a mental health training programme. The training also included learning disabilities and dementia.
- At the last inspection we highlighted there was no training for staff in how to support child callers. In October 2016, the trust rolled out child caller training and data showed a 41% completion rate.
- The trust had processes in place to coordinate responses with other providers. We saw the trust had processes to work with the police, other hospitals and other ambulance trusts for example.

Evidence-based care and treatment

• EOC staff used the Advanced Medical Priority Dispatch System (AMPDS) to assess and prioritise emergency calls. The International Academy of Emergency Dispatch (IAED), a standard setting research based non-profit organisation, oversaw the creation, development and updates of the emergency protocols. The trust used the latest version of the system and was about to roll out training for an update expected soon after the inspection.

- The EOC service had accreditation by the IAED as a centre of excellence. In order to be accredited EOC had to meet and demonstrate several minimum standards and criteria every three years.
- The trust audited their compliance on the use of the AMPDS system. For the period April 2016 to October 2016 the trust reported an average of 98.13% compliance meaning the majority of staff were using the system against minimum standards.
- The trust was a member of the Joint Royal Colleges Ambulance Liaison Committee. The clinical assessment team (CAT) worked to NICE and JRCALC guidelines and the CAT had a desktop computer containing all NICE guidelines.
- Clinical advice and support for the emergency medical dispatchers (EMD) was available from the CAT. Emergency medical dispatchers could approach the CAT for advice and support in person and by phone. The CAT could listen in to calls and provide information to EMDs via real-time electronic notes.

Assessment and planning of care

- The clinical assessment team (CAT) were a team of registered nurses and paramedics split between both EOC sites. They conducted a detailed assessment of a patient's needs. Data from the trust showed in January 2017 58.1% of calls resulted in patients taken to hospital meaning 41.9% of patients were treated over the phone, in their own home or community-based settings. This was a deteriorating picture compared to February 2016 (58.7%). Throughout this period, the trust performed worse than the England average of 43.8%. However, the trust told us this was due to increased demand and increased acuity of patients.
- The AMPDS system provided strict prompts and scripts so EMDs could assess the care and treatment needs of a patient, which ultimately influenced the response sent by a dispatcher. The CAT used pain scores with patients to assess their level of discomfort and pain. We observed staff asked patients how bad their pain was between one-to-ten; 10 being the most pain.
- There were arrangements to receive NHS 111 referrals. NHS 111 is a telephone service the public can use if they are unwell and need advice on what to do or where to

go to get treatment. NHS 111 can refer patients to emergency ambulance services. We saw the CAT triaging 111 calls and at times, they changed the patient pathway to prevent an inappropriate response. Between October 2016 and January 2017, the trust received 26,510 NHS111 emergency referrals classed as red. Of those 9,120 (34.4%) did not require the patient to be conveyed to hospital after review. The trust reported all inappropriate calls received from 111 to the provider of the service.

- Dispatchers could send a mental health triage car, which operated between 4pm and midnight seven days a week. The mental health triage car operated in Lincolnshire and Derbyshire meaning they could assess people with mental health needs. Those people could receive appropriate care, sometimes avoiding a section 136.
- Volunteer Community First Responders (CFRs) provided life-saving support to patients in their workplace or community until the arrival of an emergency ambulance. Dispatchers in Lincoln EOC were responsible for deploying CFRs. Dispatchers did not deploy CFRs as a replacement for an emergency ambulance.
- Dispatchers used dispatch protocols, which provided the guidance and framework for when and what to dispatch to different coded emergency calls. We saw dispatchers were using this protocol and referred to it if they needed further guidance.

Response times

- The trust monitored call answering response times as a way of measuring the performance of staff in EOC. We saw trust performance had deteriorated since our last inspection. The number of emergency calls received had also increased since our last inspection. Between April 2014 and March 2015, staff responded to 819,796 calls. Between December 2015 and November 2016, EOC received 893,867 emergency and urgent calls.
- The average time taken to answer a call (50th percentile) by EOC was two seconds between August 2015 and November 2016. This was worse than the England average of around 1.4 seconds. This was mostly closer to the worst performing trusts than the best performing trusts. The trust had a target of 95% of calls to be answered (call pick-up) within five seconds. Data from the trust showed between April 2016 and December 2016 trust performance was at 83.05%.

- The trust's 95th and 99th percentile times (the longest times to answer calls) showed a deteriorating trend between January 2016 and September 2016. In November 2016, the trust had the highest 95th percentile waiting time in England of 62 seconds. In November 2016, the trust had the second longest 99th percentile waiting time in the country of 114 seconds.
- The proportion of calls abandoned before answered was mostly worse than the England average for the period August 2015 to November 2016. In particular between February 2016 and October 2016 there was a deteriorating trend in trust performance with abandonment rate rising to almost three percent against the England average of just under two percent. This demonstrated a decline in performance since our last inspection where previously the abandonment rate was better than the England average. This indicator is designed to ensure ambulance services are not having problems with people phoning 999 and not being able to get through.
- There were targets for lower priority calls not requiring an ambulance response to be telephone assessed by clinicians within a certain amount of time. The target for green three calls (requiring telephone assessment within 20 minutes of a call) was 85% and the trust averaged 79.17% between April 2016 and December 2016. At our previous inspection performance for a similar period in 2015 averaged 90% demonstrating 2016 performance had dropped.
- Green four calls required 85% of calls assessed by telephone within 60 minutes. The trust consistently performed better than this target across the same period with 96.91%.

Patient outcomes

- The trust collected and monitored information about outcomes for patients. The trust produced monthly board and performance reports, which monitored outcomes. Outcomes monitored included; patients treated at the scene, treated over the phone, or taken to hospital. Managers shared information with staff about outcomes on a monthly basis by email.
- The re-contact rate measures patients re-contacting 999 within 24 hours of original emergency call Between August 2015 and November 2016 the proportion of patients who contacted the service again (following discharge of care by telephone) within 24 hours was

consistently better than the England average. The trust demonstrated continuous improvement with the re-contact rate dropping from 3% to 1%. The England average remained around 6%.

- The percentage of emergency calls resolved by telephone advice and support (hear and treat) had increased. Between August 2015 and November 2016, the percentage of patients treated over the phone fluctuated between 15% and 18%. This was better than the England average for the same period (10.5%). This meant there were more calls closed by hear and treat outcomes therefore avoiding an emergency response and possible transfer to hospital.
- There were processes to support appropriate deployment of the Hazardous Area Response Team (HART). A dispatch protocol provided guidance and escalation procedures to determine whether deployment of the HART was necessary. The incident command desk (ICD) operator was immediately responsible for the deployment of the HART. One ICD operator said they deployed HART appropriately and managers never asked to send them to an incident inappropriately. If HART were deployed this was reviewed by the regional operations manager and other senior managers on an incident-by-incident basis. At the time of our inspection the trust were reviewing their deployment criteria.

Competent staff

- All staff we spoke with said they had received an appraisal in the previous twelve months and they were meaningful. At January 2017, the trust reported 76% of staff had received their annual appraisal. The trust said they were on course to reach their target of 95% by March 2017. We saw all remaining appraisals for those staff not on long-term absences had been booked in before the end of March 2017.
- All staff we asked said they had regular one to one meetings with their manager. They said managers discussed learning and performance objectives in one to ones. Managers gave staff feedback and learning from call audits in these sessions.
- The service had processes to challenge and deal with poor staff performance. If a member of staff had not performed well against their call audits, they received an action plan and there would be an increase in the number of monthly audits taken. Managers would sign

off the action plan and reduce the number of audits taken when satisfied the member of staff was performing at the desired level. Alternatively, the service could dismiss staff because of poor performance.

- The dispatch duty managers produced monthly reports from the computer aided dispatch system (CAD). The reports enabled managers to identify gaps in performance and missed targets. Managers addressed staff performance through one to ones and support and mentoring by managers.
- The trust audited staff calls each month. They aimed to audit emergency medical dispatchers (EMD) staff on average four times a month. The minimum amount of calls each month the Trust submitted to the International Academy of Emergency Medical Dispatch (IAEMD) as part of being an Accredited Centre of Excellence was 417. Auditors sent findings to the relevant line manager and then to the individual EMD for discussion. Each quarter managers identified the top three issues and distributed learning points via CAD message and EOC bulletins to staff.
- The EOC had a dedicated training manager and team, which oversaw recruitment and training for EMDs and dispatch. There were five team members, two based in Lincoln and three at Nottingham. This meant there were specific training courses and induction programmes for EMDs and dispatchers.
- Induction programmes for EOC staff included five weeks of classroom training and time spent with a mentor or 'buddy'. There was a structured induction programme, which covered AMPDS training, safeguarding, conflict resolution and customer service. Data from the trust showed all staff had received their AMPDS training.
- All new staff received clinical training to help understand the AMPDS questioning and all staff had received Cardio Pulmonary Resuscitation (CPR) training which was refreshed every year.
- At the last inspection, we highlighted the trust should consider training for staff in the management of patients with a mental health problem and the mental capacity act (MCA). In September 2016, the trust began rolling out a mental health training, which included training on learning disabilities and dementia. The trust set targets for 20% of staff to have completed this training programme by November 2016, and for 95% of staff to complete the programme over the whole two-year period. The trust reported by January 2017 42% of staff had completed this training.

- At our previous inspection, we found there was no specific training for staff on supporting and working with child callers. The trust had established a training course on child callers. Data from the trust showed 41% of staff had received training on child callers. Training was ongoing and some staff we spoke with were yet to receive the training.
- Managers used bank staff to cover any shortfall in rotas, these staff were former EOC staff. For bank staff to be considered for shifts they had to undertake at least one shift per month. Bank staff were involved in any updates and training including updates in software to the AMPDS system.
- There were clear career pathways in the EOC, which meant staff could progress, develop and have the opportunities to do different jobs. Staff could move from the EMD role to dispatch and dispatch staff had moved to incident command, HEMS or manager positions.
 Managers described clear career progression, described shadowing opportunities, acting positions and internal promotions. Staff said discussions took place at one to one meetings. We spoke with staff who had progressed within the trust and whom managers identified for career progression in the future.
- There was sufficient knowledge in EOC at all times to assess and/or treat children. All clinicians we spoke with had experience of working with children and the AMPDS and CAD systems met the needs of patients of all ages. Some clinicians had previously been midwives and therefore staff would utilise their experience if calls came through regarding pregnant women or young children.
- Clinical supervision is an activity bringing supervisors and clinical staff together in order to reflect upon their practice. Managers provided staff opportunities for clinical supervision. Clinical staff said they had adequate access to clinical supervision. The staff attendance rates for Clinical Supervision were 41 out of 44 clinical staff (93.18%) as of the end of February 2017.
- We asked staff about mentorship and support mechanisms. Managers allocated mentors to staff following training and until staff were competent. Staff had help and support cards at workstations so they could summon help at any time from team leaders. No staff said they felt unsupported. We observed the use of mentors during our inspection and CAT staff sat amongst EMDs in order to provide support more readily.

- There was support for staff following a distressing call or a safeguarding issue. All staff told us they could access traumatic incident management (TRIM) debriefing. Staff could also access peer support and the chaplaincy as additional or alternative support routes. Staff could refer themselves for counselling and had access to quiet rooms. Staff told us managers allowed them to have "time out" after a distressing call.
- We saw two midwives working in the CAT team had received obstetrics training. Managers had plans to roll this training out to other clinicians across both EOCs. In addition, the CAT manager planned to deliver chronic obstructive pulmonary disease (COPD) training to staff.

Coordination with other providers

- The electronic systems used by the different teams in EOC enabled all staff to be involved and work together in the assessment, planning and delivery of care and treatment to patients. Emergency medical dispatchers (EMDs) made initial assessments of patients using specific prompts on the Advanced Medical Priority Dispatch system (AMPDS). The clinical assessment team (CAT) and dispatchers used the information from AMPDS to assess, plan and ensure the appropriate delivery of care .This meant by using one system patient care and treatment was coordinated involving all staff.
- The duty manager at the Lincoln EOC contacted other health care providers in Lincolnshire if they became aware of any issues, which could affect patient care or delivery of the service. A dedicated team at Nottingham liaised with other health care providers on a regular basis.
- The trust had procedures for inter-hospital or inter-facility transfers and responding to urgent GP calls. A dedicated EMD officer provided a 24-hour service for any urgent GP transfers to hospitals. Hospitals and EOC had direct telephone lines to each other. We saw dispatch staff allocating the appropriate response to inter-facility and urgent calls. If requests from health care professionals ran over the designated response time, the EMD would call to advise them and extend the pick-up time.
- There were direct lines between the EOC, the fire service and the police meaning there was fast and responsive contact between the services. It was the EMDs responsibility to call and receive calls from fire and the police. We saw examples of effective communication between the services However, there were occasions

where there was a lack of understanding and differing expectations about what the ambulance service could provide. An example of this was when the police believed a higher priority (quicker) response was required to the one identified by the ambulance service.

- There was effective communication and cross boundary working with neighbouring ambulance services. Other ambulance services supported incidents and emergencies in the east midlands and the trust supported other ambulance services with resources. We saw there was regular communication about and sharing of air ambulance resources.
- Patients with do not attempt cardio pulmonary resuscitation (DNACPR) orders were not routinely identified on the 999 Computer Aided Dispatch (CAD) system. If a caller telephoned about a patient in cardiac arrest, and felt CPR was in the patient's best interests, the call taker would support the caller until a clinician arrived on scene. Staff informed ambulance crews or clinicians attending the scene there might be a DNACPR in place.
- Certain identified nursing homes had alerts attached so dispatchers and crews knew there could be a possible do not attempt cardio pulmonary resuscitation (DNACPR) in place for a patient. Staff could identify specific end of life care plans and these included DNACPR orders. If a caller mentioned a patient had a DNACPR, an EMD wrote in the notes to ask the crew to check it. Ambulance clinicians were trained to recognise and act on DNACPR orders
- The ROM role worked with other healthcare providers including other hospital trusts and clinical commissioning groups on performance related issues. This included when services were busy for example when hospitals asked for peripheral diverts to help with their capacity.
- Staff from the trust attended a mental health steering group. Staff from other organisations including clinical commissioning groups and local authorities also attended. The group discussed and coordinated mental health provision and resources across the east midlands. The group provided updates on initiatives and funding opportunities to improve mental health support to patients.

Multidisciplinary working

• There were twice daily handover meetings between the two EOCs. A senior manager conducted the meetings by

teleconference. Handovers included what had occurred on the previous shift, performance, what the current issues were and what issues could occur during the next shift. We observed a handover; communication was clear and possible risks to services identified. We saw actions implemented to mitigate potential issues affecting performance.

- We observed shift handovers in the EMD, CAT and dispatch team. The handovers were smooth with effective communication involving any issues with crews or incidents, which crews were due breaks and ongoing incidents/emergencies. There were handover sheets so the incoming dispatcher had a hard copy of the information to hand.
- We observed supportive relationships between dispatchers and crews. Conversations were respectful but friendly and good-humoured and dispatchers spoke highly of crews. Overall staff in different teams worked well with each other including crews on the road. Staff said they had good relationships with crews.
- The CAT worked with a variety of other agencies. They linked in with the crisis team for people who had mental health conditions and signposted to other agencies.
- Lincoln EOC was located in a compact space where staff had easy access to each other. This meant if an EMD required support with a challenging call there was always a clinician or more experienced member of staff nearby to assist.
- We spoke with staff about how they worked with other agencies such as the Fire and Rescue Service, Police and voluntary services. They explained how under the Joint Emergency Services Interoperability Programme (JESIP) they used a joint decision model for working with fire and police.

Access to information

 At our previous inspection, we identified a large number of frequent callers who did not have care plans. Staff referred people who called regularly (frequent callers) to the high volume service user lead. Since April 2014 when EMAS started reporting on patients who called five or more times in a calendar month and December 2016, there had been an increase of 132.4% (312 to 725) in frequent callers. Between August 2015 and December 2016, the proportion of calls from patients for whom a locally agreed frequent caller procedure was in place was consistently lower than the England average. Of these 725 callers the trust were managing 65 under the

frequent caller policy, 43 of whom had a care plan in place. All other frequent callers were managed on a call by call basis. Therefore, the trust was still only allocating a care plan to approximately 10% of frequent callers. A specific icon on the AMPDS system clearly identified frequent callers. Clicking the icon led the EMD to specific instructions for the caller usually in the form of a care plan. A dispatch officer made sure ambulance crews attending to the patient received the information. An electronic alert identified frequent callers on the system

even if they did not have care plans. There were review dates for all alerts on a monthly basis. Referrers received an email alert asking whether they felt the alert should stay on the system.

- The EOC quality officer monitored the number of calls EOC received from the same phone numbers. Many frequent callers were hard to identify due to calls made by anonymous and unregistered numbers. Part of the quality officer role was to compile evidence for the police and telephone services to cut off nuisance frequent callers. This helped staff to support genuine patients and prevented them being tied up on nuisance calls.
- The AMPDS system was able to alert staff to avoid potential duplicate calls and responses. If EOC received calls from the same caller three times, staff passed the caller to the CAT to triage.
- Call handlers could raise concerns with the trust mental health team for known frequent callers. Emergency medical dispatchers could also take clinical advice from the CAT if there were no alerts or outcomes on the system.
- We saw each workstation had an AMPDS flip file staff used as a backup in case of information technology faults or for planned system shut downs for upgrade or maintenance work. A member of staff demonstrated to us how they would use the flip file.
- Staff used joined up electronic systems in EOC. All staff could see calls and incidents come in to the EOC in real time. Staff could see any electronic notes instantly seen by other teams and members of staff. Staff could listen to each other's calls in order to provide information or more appropriate responses. The instant access to information enabled staff to make decisions and send appropriate responses quickly.
- The trust used "change Wednesdays" across the trust to avoid daily contact with staff about minor change to policies and systems. Staff were confident any changes

to policies or procedures would take place on the same day every week. The service told staff in advance of any changes and the notice period depended on the scale of the change.

 The trust had taken actions to address NHS England's 2015 Patient Safety Alert: Harm from delayed updates to ambulance dispatch and satellite navigation systems. The EOC systems team updated the CAD system every six weeks to ensure the system had the most up to date information when providing information to staff. The team also managed queries concerning difficulties with addresses. We saw third party providers regularly updated satellite navigation systems. Therefore, the trust had mechanisms to ensure staff had access to the latest information to help prevent delays.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- It was difficult for staff to judge whether a patient or caller had capacity simply by speaking to them over the phone. However, staff still needed to send a response because staff could not make judgements on a patient's capacity to make decisions.
- EOC staff asked crews to assess the capacity of patients if there were concerns.
- Section 136 of the Mental Health Act 1983 allows a police officer to remove a person they think is mentally disordered and "in immediate need of care or control" from a public place to a place of safety. The trust had protocols for section 136 and transporting patients to and from places of safety. The National Ambulance Mental Health Group approved the Trust's protocol. We observed staff using the protocol when receiving calls from police to transport patients.
- We reviewed trust response times to section 136 requests. Between January 2016 and January 2017 the trust received 359 section 136 requests. All calls (with one exception) were classed as green two calls, requiring an ambulance response within 30 minutes. The average response time across this period was 41 minutes. In the months of October 2016 and November 2016 response times averaged over one-hour. This meant the trust did not provide timely responses to section 136 requests.

Is emergency operations centre caring?



Outstanding practice and areas for improvement

Outstanding practice

- The trust had developed an increasing number of collaborative working arrangements which had led to improvements in the accessibility of the services that were delivered to patients. This was of particular benefit to patients located in remote areas and for patients who required specialist mental health care.
- All staff in the Leicester, Leicestershire and Rutland area had been provided with a trust mobile phone which had improved staff access to information on the availability of services and trust policies.
- We observed caring, professional staff delivering compassionate, patient focused care in circumstances that were challenging due to the continued demand placed on the service.
- The trust were trialling an initiative in North and North East Lincolnshire. Where patients presented with the symptoms of sepsis, blood cultures were taken and a pre hospital dose of intravenous antibiotic therapy administered to the patient. This saved valuable time and provided prompt lifesaving treatment.
- The mental health triage car operating in Derbyshire and Lincolnshire enabled patients to access pathways more equipped to treat and manage patients with mental health conditions.

Areas for improvement

Action the hospital MUST take to improve

- The trust must ensure all incidents are managed in line with the trust policy and that learning from incidents is effectively shared to ensure learning and improvements take place across the trust.
- The trust must ensure all staff are fitted for and trained in the use of a filtered face piece mask to protect them from air borne infections.
- The trust must ensure all staff are provided with the opportunity to complete statutory and mandatory training.
- The trust must ensure that staff are supported to achieve an improved awareness of the legal duty of candour.
- The trust must ensure there are systems in place to ensure staff have received, read and understand information when there are updates to trust policies, procedures or clinical practice.
- The trust must ensure patients receive care and treatment in a safe way by meeting national and locally contracted response time targets for Red1 and Red2 categorised calls.
- The trust must ensure staff know how to report incidents and learning from incidents is shared in a way staff can access.

- The trust must take steps to improve EOC call taking response times therefore reducing the number of calls abandoned and the length of time callers are waiting on the phone.
- The trust must increase the percentage of frequent callers who have a specific care plan.

Action the hospital SHOULD take to improve

- The trust should continue to provide all front line staff with the opportunity to complete training relating to the care of mental health illness.
- The trust should ensure staff are given sufficient time to check vehicle equipment expiry dates and stock levels to ensure sufficient equipment is available for patient use.
- The trust should ensure the servicing of all equipment is completed at the intervals scheduled in line with the manufacturer's instruction.
- The trust should ensure that all equipment is checked by staff in line with the manufacturer's instructions.
- The trust should ensure clinical waste material is managed in line with legislation and best practice guidance.
- The trust should consider how to ensure a robust audit trail of access to controlled drugs on solo responder vehicles.

Outstanding practice and areas for improvement

- The trust should consider how to ensure continued provision of sufficient clinical mentors for newly qualified staff.
- The trust should consider how to ensure hospital ambulance liaison officers (HALOs) have the skills, knowledge and understanding required to positively impact on hospital handover delays.
- The trust should continue to work with other providers and commissioners on reducing handover delays to improve timeliness of resource allocation in EOC.

Action we have told the provider to take

The table below shows the fundamental standards that were not being met. The provider must send CQC a report that says what action they are going to take to meet these fundamental standards.

| Regulated activity | Regulation |
|---|---|
| Diagnostic and screening procedures Transport services, triage and medical advice provided remotely Treatment of disease, disorder or injury | Regulation 17 HSCA (RA) Regulations 2014 Good governance Systems must be established and operated effectively to assess, monitor and mitigate the risks relating to the health, safety and welfare of service users and others who may be at risk which arise from the carrying on of the regulated activity. How the regulation was not being met: Incidents were not always reported and some that were reported were not investigated promptly. Methods used to share learning from incidents did not assure changes were made to improve practice to prevent future incidents. Not all qualifying staff were fitted for and trained in the use of a filtered face piece mask. |
| | |

Regulated activity

Diagnostic and screening procedures

Transport services, triage and medical advice provided remotely

Treatment of disease, disorder or injury

Regulation

Regulation 17 HSCA (RA) Regulations 2014 Good governance

Systems or processes must be established and operated effectively to assess, monitor and improve the quality and safety of the services provided in the carrying on of the regulated activity

How the regulation was not being met:

The trust did not have systems in place to ensure staff had received, read and understood information when there were updates to trust policies, procedures or clinical practice.

Regulated activity

Diagnostic and screening procedures

Transport services, triage and medical advice provided remotely

Treatment of disease, disorder or injury

Regulation

Regulation 18 HSCA (RA) Regulations 2014 Staffing

Persons employed must receive such appropriate support, training, professional development, supervision and appraisal as is necessary to enable them to carry out the duties they are employed to perform.

How the regulation was not being met: Not all staff had received statutory and mandatory training.

Regulated activity

Diagnostic and screening procedures

Transport services, triage and medical advice provided remotely

Treatment of disease, disorder or injury

Regulation

Regulation 20 HSCA (RA) Regulations 2014 Duty of candour

A health service body must act in an open and transparent way with relevant persons in relation to care and treatment provided to service users in carrying on a regulated activity.

How the regulation was not being met: Not all staff were aware of their legal responsibilities under the Duty of Candour Regulation.

Regulated activity

Diagnostic and screening procedures

Transport services, triage and medical advice provided remotely

Treatment of disease, disorder or injury

Regulation

Regulation 12 HSCA (RA) Regulations 2014 Safe care and treatment

Care and treatment must be provided in a safe way for service users.

How the regulation was not being met: The provider was not meeting national or locally contracted response time targets for Red1 and Red2 categorised calls.

The provider was not meeting national response time targets for A19 categorised calls.

Regulated activity

Transport services, triage and medical advice provided remotely

Regulation

Regulation 17 HSCA (RA) Regulations 2014 Good governance

Systems must assess, monitor and mitigate the risks relating to the health, safety and welfare of service users and others who may be at risk which arise from the carrying on of the regulated activity.

How the regulation was not being met: Staff did not know how to report incidents using the trust incident reporting process.

Staff did not receive feedback and learning from incidents.

Regulated activity

Transport services, triage and medical advice provided remotely

Regulation

Regulation 18 HSCA (RA) Regulations 2014 Staffing

(Persons employed by the service provider must) Receive such appropriate support, training, professional development, supervision and appraisal as is necessary to enable them to carry out the duties they are employed to perform.

How the regulation was not being met: Not all staff attended and accessed mandatory training.

Regulated activity

Transport services, triage and medical advice provided remotely

Regulation

Regulation 12 HSCA (RA) Regulations 2014 Safe care and treatment

Care and treatment must be provided in a safe way for service users. A registered person must comply with this by assessing the risks to the health and safety of service users and doing all that is reasonably practicable to mitigate any such risks.

How the regulation was not being met:

The trust were not meeting response time targets for call answering, green three (telephone response in 20 minutes) and demonstrated deteriorating performance in call abandonment.

There was a high number of frequent callers without care plans.

Regulated activity

Transport services, triage and medical advice provided remotely

Regulation

Regulation 20 HSCA (RA) Regulations 2014 Duty of candour

Registered persons must act in an open and transparent way with relevant persons in relation to care and treatment provided to service users in carrying on a regulated activity.

How the regulation was not being met: Staff did not know or understand their responsibilities under the Duty of Candour Regulation.