NHS
East of England Ambulance Service
NHS Trust

Cambridgeshire Health Overview and Scrutiny Committee

Kevin Brown – Director of Service Delivery
Paul Marshall – Int Sector Head

Introduction

East of England Ambulance Service NHS Trust

- Who are we?
- What is our demand?
- Our performance in Cambridgeshire
- Issues affecting our performance
- How EEAST is caring for our sickest Patients
- ARP – single biggest change to the Ambulance service for decades
- Innovation

Who are we?

East of England Ambulance Service NHS Trust

We're the East of England Ambulance Service NHS Trust (EEAST). We're one of ten ambulance trusts within England and have a clear and simple mission: "*To provide a safe and effective healthcare service to all of our communities in the east of England*"

Our role

We provide a wide range of emergency, urgent and non-emergency services spanning six counties and around six million people. From towns and cities to rural and coastal communities, we deliver safe and high-quality care wherever it is needed, from in-the-home support to journeys to hospital.

We're at the heart of the region's health and social care services. We work together with many partners - from healthcare commissioners to local authorities, patients and patient groups, national regulators to other 'blue light' services - to deliver safe and seamless support for patients.

Our vision

Our patients are paramount and the safety and quality of care will always be our focus. Our resources remain stretched. Pressure on wider health and social care support in our communities continues to increase.

We need to find new ways of delivering our services and help ease the strain across the health care system. Our staff are developing innovative services and ways of working to deliver the right care to patients, first time, every time.

Increasingly, this means helping to join up healthcare for patients. Making on-the-phone assessments and sign-posting callers to alternative sources of care (e.g. GPs) where appropriate. Delivering care in the home where this is best for patients. Making journeys to hospital only where this is required.

Our people

At the centre of all these efforts are our skilled, committed and compassionate staff and volunteers. They are the beating heart of our service. From admin roles to paramedics, transport planners to call handlers, every one of them helps us deliver the right care to patients.

We are united by a set of common values that guide the way we work with each other, partners and patients: care, teamwork, quality, respect, honesty.

Our future

We see many opportunities for enhancing health and social care across this region. We're committed to playing our part in a changing NHS.

Demand

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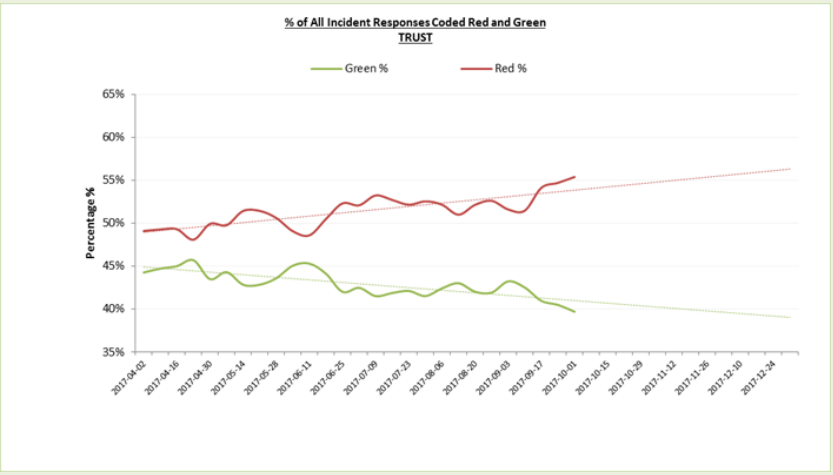
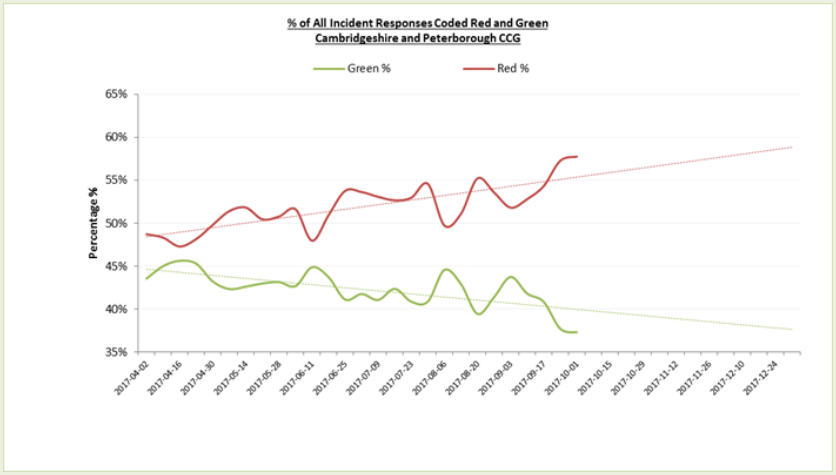
Activity

Demand on the ambulance services is increasing around 3.4% per year. Within this figure is a disproportionate rise in higher acuity callers meaning the services are required to respond to more patients in the shortest possible time.

Prior to the change to the ARP standards higher acuity calls represented over 50% of all the 999 responses made. These call are usually more complex and take longer to assist patients.





Demand

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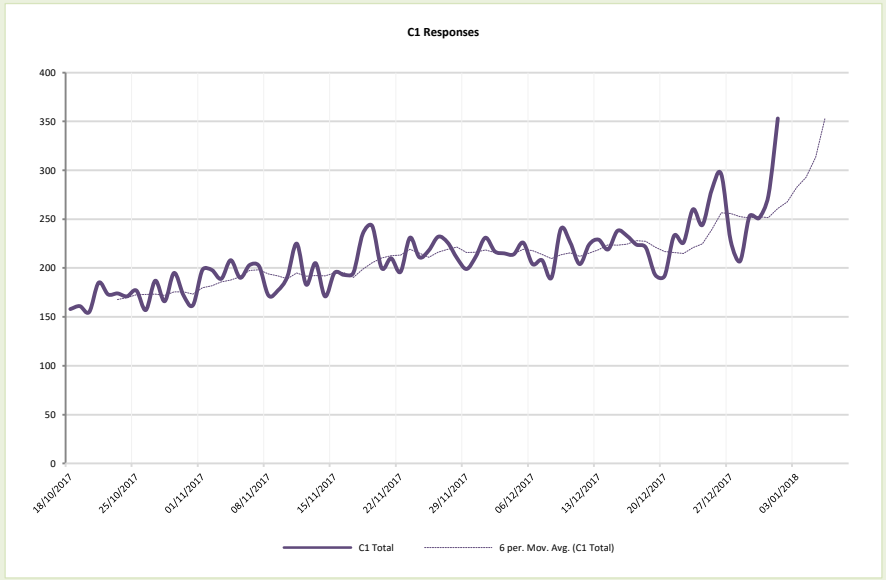
Activity

Since the implementation of ARP, EEAST is already seeing an increase in Category1 calls – the most serious of calls. The proportion of these calls represents around 10% of all of our work, increased from the initial 8%.



Demand

Cambridgeshire activity We have experienced an increase in call volume every month except July when compared to 2016/17

		Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	YTD
Calls	2016	11,547	12,273	12,437	14,061	12,395	12,408	13,474	12,872	14,260	115,727
	2017	11,768	12,895	13,781	13,725	12,905	12,922	13,972	14,042	14,922	120,932
Conveyed	2016	5,736	6,214	6,128	6,428	5,962	6,155	6,395	6,203	6,651	55,872
	2017	5,968	6,188	6,007	5,999	5,814	5,734	6,204	6,093	6,443	54,450

Yet are conveying less patients every month (since May) when compared to 2016/17

Top 5 codes Our top 5 codes has remained the same type of issue, with an increase in most.

Year	Breathing problems	Chest Pain	Falls	Sick Person	HCP admission
2016/17	7%	8%	13%	5%	7%
2017/18	10%	11%	15%	4%	10%

Performance

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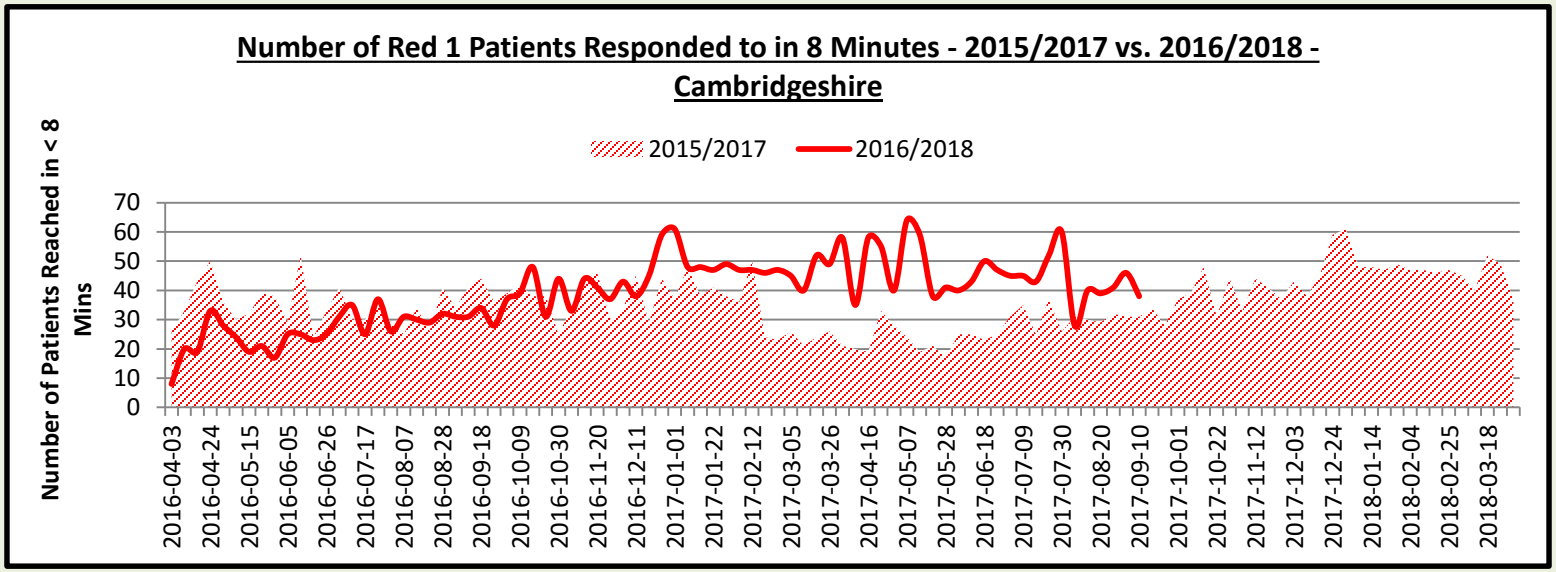
Although our ytd performance before ARP for our sickest patients was at 67%, we successfully responded to around 30% more patients within 8 minutes.



Performance

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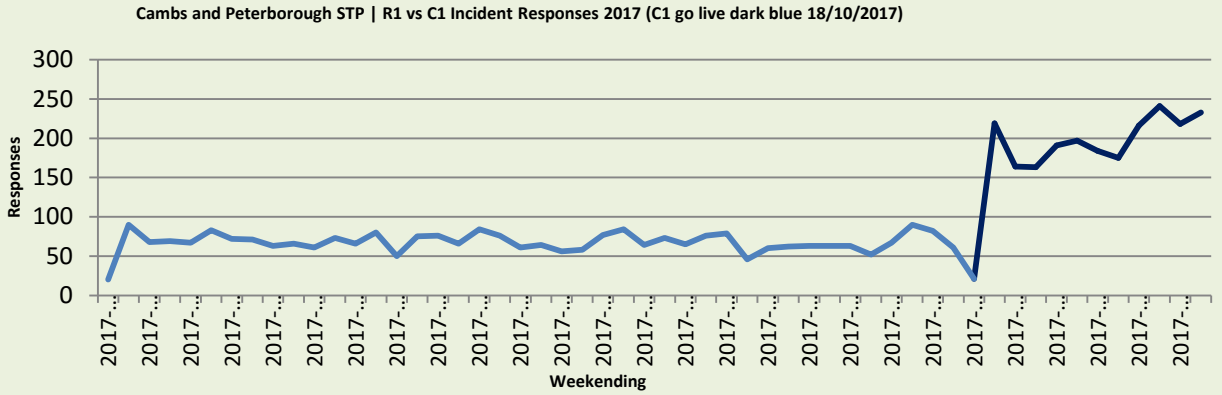

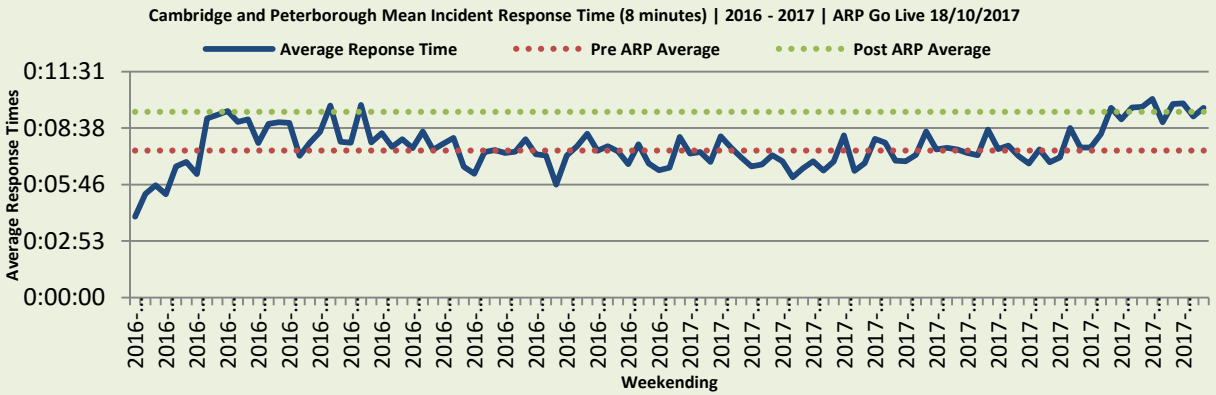

Issues affecting performance

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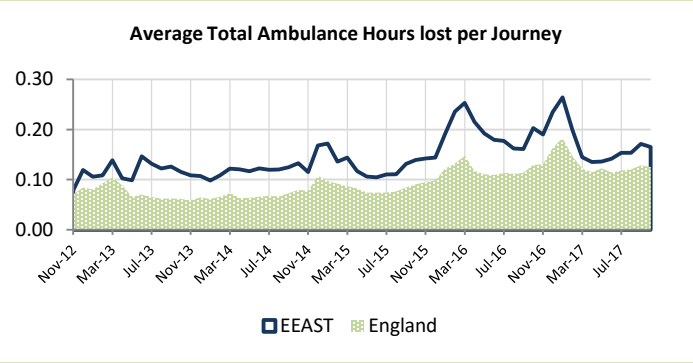
Handover Delays

As of November 2017 EEAST continues has the highest number of lost ambulance hours from hospital handover delays in England. This means that we are forced to 'stack' 999 callers who we are waiting to send ambulances to because they are waiting to offload their patients at hospitals. EEAST levels exceed every other service in England and have been higher than the national average for 5 years.



Capacity Gap

We have been working with Commissioners and Regulators on the assertion that EEAST has a significant capacity gap compared to the demand on the service and pressures such as hospital delays.

An independent service review (ISR) was commissioned by NHS England to independently recommend whether further funding to EEAST is required.

This report is due for release shortly but is expected to confirm that EEAST requires additional funding for several hundred more staffing positions in order to accommodate the growing pressure on the service.

Ambulance to Hospital Handover data

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Handover Delays

Cambridgeshire Hospitals compared to Trust wide (December 2017)

Hospital	Patient Journeys	No of Patient Handover Times	No. > 15min	% > 15min	No. > 30min	% > 30min	No. > 60min	% > 60min	No. > 75min	% > 75min
Addenbrookes Hospital	2878	2717	1208	44	184	7	31	1	8	0
Barnet General Hospital	589	464	294	63	120	26	35	8	27	6
Basildon & Thurrock Hospital	2710	2385	1621	68	476	20	134	6	83	3
Bedford Hospital South Wing	1660	1406	582	41	169	12	40	3	22	2
Broomfield Hospital	2724	2291	1885	82	790	34	245	11	156	7
Colchester General Hospital	2993	2634	2238	85	753	29	222	8	139	5
Hinchingbrooke Hospital	1047	910	691	76	268	29	95	10	55	6
Ipswich Hospital	2565	2346	1760	75	550	23	117	5	62	3
James Paget Hospital	2055	2005	895	45	178	9	81	4	65	3
Lister Hospital	2687	2074	1221	59	340	16	70	3	43	2
Luton And Dunstable Hospital	2669	1875	964	51	240	13	34	2	17	1
Norfolk & Norwich University Hospital	4335	3600	2843	79	1645	46	736	20	549	15
Peterborough City Hospital	2115	1603	1251	78	693	43	307	19	212	13
Princess Alexandra Hospital	1911	1668	1284	77	510	31	60	4	26	2
Queen Elizabeth Hospital	1905	1669	1382	83	654	39	311	19	229	14
Southend University Hospital	2822	2256	1496	66	700	31	271	12	188	8
Watford General Hospital	2460	1920	1575	82	578	30	176	9	115	6
West Suffolk Hospital	1930	1730	1334	77	470	27	92	5	52	3

Ambulance to Hospital handover data

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Handover Delays

Cambridgeshire Hospitals compared to Trust wide (2 week festive period)

Hospital	Patient Journeys	No of Patient Handover Times	No. > 15min	% > 15min	No. > 30min	% > 30min	No. > 60min	% > 60min	No. > 75min	% > 75min
Addenbrookes Hospital	1339	1263	666	53	138	11	34	3	12	1
Barnet General Hospital	254	206	136	66	68	33	24	12	21	10
Basildon & Thurrock Hospital	1201	963	623	65	196	20	78	8	59	6
Bedford Hospital South Wing	748	603	250	41	84	14	23	4	13	2
Broomfield Hospital	1196	900	757	84	391	43	177	20	130	14
Colchester General Hospital	1337	1095	943	86	399	36	149	14	106	10
Hinchingbrooke Hospital	481	427	343	80	152	36	62	15	37	9
Ipswich Hospital	1171	1048	797	76	295	28	106	10	68	6
James Paget Hospital	975	934	495	53	152	16	80	9	67	7
Lister Hospital	1241	940	665	71	251	27	71	8	41	4
Luton And Dunstable Hospital	1246	829	484	58	162	20	39	5	26	3
Norfolk & Norwich University Hospital	1892	1207	1088	90	724	60	358	30	287	24
Peterborough City Hospital	934	658	526	80	305	46	148	22	113	17
Princess Alexandra Hospital	856	775	597	77	229	30	33	4	12	2
Queen Elizabeth Hospital	873	721	608	84	334	46	170	24	134	19
Southend University Hospital	1265	904	640	71	353	39	153	17	109	12
Watford General Hospital	1096	822	685	83	278	34	113	14	85	10
West Suffolk Hospital	900	769	599	78	234	30	56	7	26	3

Patient care

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1 Return of Spontaneous Circulation (ROSC) Following a cardiac arrest, the Return of Spontaneous Circulation (ROSC) (for example, signs of breathing, coughing, or movement and a palpable pulse or a measurable blood pressure) is a main objective for all out-of-hospital cardiac arrests, and can be achieved through immediate and effective treatment at the scene.

all

national average 31%

35%

ulstein

53%

71%

The return of spontaneous circulation is calculated for two patient groups. The overall rate measures the overall effectiveness of the urgent and emergency care system in managing care for all out-of-hospital cardiac arrests. The rate for the 'Utstein comparator group' provides a more comparable and specific measure of the management of cardiac arrests for the subset of patients where timely and effective emergency care can particularly improve survival. For example, 999 calls where the arrest was not witnessed, and the patient may have gone into arrest several hours before the 999 call are included in the figures for all patients, but are excluded from the Utstein comparator group figure.

NHS England AQI – Clinical outcomes (published Dec 2017)

Patient care

East of England Ambulance Service NHS Trust

2 Survival to Discharge following cardiac arrest Number of patients who had resuscitation commenced/continued by ambulance service following an out-of-hospital cardiac arrest, who were discharged from hospital alive

all

national average 10%

13%

Ulstein

29%

45%

NHS England AQI – Clinical outcomes (published Dec 2017)

Patient care

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3 Outcome from acute ST-elevation myocardial infarction Heart attack or ST segment elevation myocardial infarction, (STEMI) is caused by a prolonged period of blocked blood supply. It is therefore vital that blood flow is quickly restored through clinical interventions such as thrombolytic ("clot-busting") treatment or primary percutaneous coronary intervention.

within 150 minutes

national average

82%

87%

received appropriate care bundle

76%

91%

NHS England AQI – Clinical outcomes (published Dec 2017)

Patient care

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4 Outcome from Stroke As set out in the NICE national quality standard, the health outcomes of patients can be improved by recognising the symptoms of a stroke or transient ischaemic attack (TIA), making a diagnosis quickly, and early transport of a patient to a stroke centre capable of conducting further definitive care including brain scans and thrombolysis.

within 60 minutes

national average 55%

50%

received appropriate care bundle

97%

100%

NHS England AQI – Clinical outcomes (published Dec 2017)

ARP

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Following the largest clinical ambulance trials in the world, NHS England implemented new ambulance standards across the country known as the *Ambulance Response Program (ARP)*.

In a letter to Jeremy Hunt, Secretary of State for Health, Sir Bruce Keogh outlined why the results from the trial demonstrate that changes should be adopted nationally. The new system updated a decades old system that addresses the issue that most aspects of UK ambulance services have changed beyond recognition:

- a large number of responses now focus on the frail elderly rather than traditional medical emergencies,
- half of all calls are now resolved by paramedics without the need to take patients to hospital,
- for specialist care the focus of the ambulance service is increasingly on getting patients to the *right* hospital rather than simply the nearest.

Over the last four decades, however, ambulance services have had to remain organised around an eight minute response time target.

In its 18 month trial phase, the ARP covered over 14 million calls, testing a new operating model and new set of targets. In summary this new system would:

1. Change the **dispatch model** of the ambulance service, giving staff slightly more time to identify patients' needs and allowing quicker identification of urgent conditions.
2. Introduce new target **response times** which cover every single patient, not just those in immediate need. For the most urgent patients we will collect mean response time in addition to the 90th percentile, so every response is counted.
3. Change the **rules around what "stops the clock"**, so targets can only be met by doing the right thing for the patient.

ARP is in 2 phases; phase 1 below relates to EOC process and phase 2 involves changes to the categories (code sets) that ambulance service triage 999 callers into.

In October 2016, EEAST joined a national pilot for phase 1 that aims to give patients a more clinically appropriate response to people who call 999 for help, implementing the following:

- **Dispatch on Disposition** (DOD): Where a maximum clock start of 240 seconds for all calls except predicted or confirmed Red 1s (where we continue to dispatch as soon as possible). The additional time to triage 999 calls (compared to the previous 60 seconds) means they can be more appropriately resourced "first time" as it gives more time to find out the clinical need of the patient. New deployment guidelines were also introduced in line with this change to clock start for Red 2 and Green calls.

- **Changes to the opening call taking process for 999** calls to "predict" Red 1 calls before full coding:
  - New "pre-triage questions" (PTQ) opening the call to assist with immediate identification of patients that are not breathing or have a potential airway problem.
  - Introduction of the **Nature of Call (NoC)** which allow selection of "key words" (for example "choking") based on the initial description of the problem by the caller. These key words cover the most likely conditions to result in a Red 1 and Red 2 coded call.

Phase 2 saw ambulance services move from having 6 triage codes (Red1,2 Green 1-4) to 4 that are outlined on the next slide:

ARP oversight of the new standards

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Cat 1: Immediately Life Threatening

Response Time Standard:
Mean response time ≤ 7 Minutes
90th percentile ≤ 15 Minutes
Clock start Triggers the earliest of:

- The call is coded
- The first resource is assigned
- 30 seconds from call connect

Clock stop by:

- Trust resource arriving on scene including PAS/VAS deployed by Trust
- CFR, Co Responder
- HCP with a defib next to the patient

Cat 2: Emergency

Response Time Standard:
Mean response time ≤ 18 Minutes
90th percentile ≤ 40Minutes
Clock start Triggers the earliest of:

- The call is coded
- The first resource is assigned
- 240 seconds from call connect

Clock stop by:
If a patient is transported by an emergency vehicle, only the arrival of the
transporting vehicle counts. If the patient does not need transport the first response arrives at the scene of the incident.

Cat 3: Urgent

Response Time Standard:
90th percentile ≤ 120 minutes
Clock start Triggers the earliest of:

- The call is coded
- The first resource is assigned
- 240 seconds from call connect

Clock stop by:
If a patient is transported by an emergency vehicle, only the arrival of the *transporting vehicle* counts. If the patient does not need transport the first
response arrives at the scene of the incident.

Cat 4: Less Urgent

Response Time Standard:
90th percentile ≤ 180 minutes
Clock start Triggers the earliest of:

- The call is coded
- The first resource is assigned
- 240 seconds from call connect

Clock stop by:
If a patient is transported by an emergency vehicle, only the arrival of the *transporting vehicle* counts.

Innovation and the wider system

We continually look to improve patient care and patient outcomes, often through innovative schemes or pathways.

Currently in Cambridgeshire:

- We are providing Hospital Ambulance Liaison Officers at both Addenbrookes and Peterborough City Hospital
- We have introduced a Patient Safety Intervention Team to work closely with the Hospitals to keep patient safety as the highest priority whilst working to release our queuing Ambulances to respond to those patients in the community who are at risk
- We are providing an Urgent Vehicle; a dedicated response for the increased HCP demand
- We are in talks with commissioners to provide an Early Intervention Vehicle (EIV) to respond to the many elderly fallers in a collaborative and integrated way.
- We are discussing with Cambridgeshire Fire and Rescue Service to provide a joint response to the elderly non-injury fallers in the community, where EEAST will provide a clinical oversight and CFRS will provide a community Fire safety check.
- We are exploring a possible collaboration with First Response Service to provide a joint emergency Mental Health response service. (slide 19)

Innovation and the wider system

Mental Health Response Vehicle (MHRV) – TRIAL

Through combining the expertise of the Mental Health Practitioner and the Paramedic the MHRV will provide a bio-psycho-social assessment allowing the identification and differential diagnosis of mental health presentations and needs, and/or physical health presentations and needs, with the provision of immediate medical intervention at the scene. Rapid treatment and intervention will be provided to reduce risks and vulnerabilities which may have contributed to the need for an emergency response. Via triage and partnership working on scene, the Mental Health Response Vehicle will contribute to more effective use of acute services (ED, MHA Assessment, Crisis and Home Treatment Team). Through signposting and referral into follow-up care pathways patients will be directed to appropriate interventions in the right setting for longer-term support.

The MHRV will be managed by EEAST and requests will come directly from a 999 call, from either EOC or First Response Service (CPFT). As the model develops, the team will also respond to calls from existing Mental Health Services, GPs and other front line emergency services already on scene with patients.

System engagement

EEAST continually work with system partners through external groups and meetings such as:

- Health & Care Exec
- System Delivery Board
- Clinical Advisory Group
- Joint Strategic Operability Board
- Cambridgeshire & Peterborough Local Resilience Forum
- Urgent & Emergency Care Delivery group
- A&E Delivery Boards
- JET steering group

To provide a collaborative approach to delivering the best possible health and care to the communities of Cambridgeshire and Peterborough

Our biggest challenges

- Historical under funding and investment with more demand and unmatched funding
- Loss of ambulance capacity with delayed handover at hospitals locally and regionally. This displaces resources, introduces long distance travelling and longer waiting times
- Demand increases on 999