

HERTFORDSHIRE COUNTY COUNCIL

HEALTH SCRUTINY COMMITTEE

THURSDAY, 5 OCTOBER 2017 AT 10.00AM

Appendix 1

NATIONAL AMBULANCE RESPONSE PROGRAMME (ARP)

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1. PURPOSE OF THE REPORT

- 1.1 To provide the Health Scrutiny Committee (HSC) with an overview of the new National Ambulance Response Programme being introduced within East of England Ambulance Service (EEAST) in October 2017.

2. SUMMARY

- 2.1 Following the largest clinical ambulance trials in the world, Sir Bruce Keogh former NHS England National Medical Director, has recommended to Jeremy Hunt, Secretary of State, the Ambulance Response Programme. The Programme is based on academic research conducted at Sheffield University. Academics monitored more than 14 million ambulance calls under the trial and found no patient safety incidents. (If you would like to read the Sheffield University's report on the Ambulance Response Programme it can be accessed via this link <https://www.england.nhs.uk/publication/arp-evaluation/>)
- 2.2 ARP is to be implemented nationally following the success at the trial Ambulance Trusts. EEAST will commence roll out on the morning of 18 October 2017.

3. BACKGROUND

- 3.1 The ARP will update a system that has been in operation for many years. It is anticipated that this will future proof the service. Historically ambulance services are allowed up to 60 seconds from receiving a call to sending a vehicle. Currently ambulance services are measured on the time it takes from receiving a 999 call to a vehicle arriving at the patient's location. Life-threatening and emergency calls, at present, should be responded to in eight minutes. However, evidence highlights that most patients do not need this level of response.
- 3.2 The ARP will entail a number of changes to ensure that the best, high quality, most appropriate response is provided for each patient first time. The ARP will provide call handlers with more time to assess 999 calls that are not immediately life-threatening. This will enable them to identify patients' needs better and send the most appropriate response.
- 3.3 ARP will see the introduction of four categories of call.

- Category 1 – Calls from people with life-threatening illnesses or injuries <https://youtu.be/7YLEgZDT9nY>
 - Category 2 – Emergency calls <https://youtu.be/cu3dad-Fkbk>
 - Category 3 – Urgent calls <https://youtu.be/31uawNJhZvQ>
 - Category 4 – Less urgent calls <https://youtu.be/71LBNIktDSA>
- 3.4 Benefits for patients under the new system will include earlier recognition of life-threatening conditions, particularly cardiac arrest. A new set of pre-triage questions will identify those patients in need of the fastest response.
- 3.5 It is anticipated that the new targets should also free up more vehicles and staff to respond to emergencies. For a stroke patient this means that the ambulance service will be able to send an ambulance to convey them to hospital, when previously a rapid response vehicle would 'stop the clock' but cannot transport them to A&E. This means that stroke patients will get to hospital or a specialist stroke unit quicker because the most appropriate vehicle can be sent first time.
- 3.6 The attached presentation at Appendix A includes further detail to assist with the understanding of the principles within the ARP.
- 3.7 In addition EEAST would like to invite members to visit two stations in Hertfordshire that are part of the new approach.
- 3 November 2017 – West Herts station
 - 6 November 2017 – Stevenage station



Ambulance Response Programme New National Standards

25/08/17



1. ARP Introduction
2. What does ARP seek to do
3. Current vs new standards
4. Oversight of new standards

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ARP: An Introduction

Following the largest clinical ambulance trials in the world, NHS England is to implement new ambulance standards across the country.

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 will update 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, the services have had to remain organised around an eight minute response time target.



What Does ARP Seek to Do?

Over the last 18 months the ARP has 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 the code set changes. 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.

ARP is endorsed by:



What Does ARP Seek to Do?

Changes to triage questions

The “Nature of Call” system introduces three standardised pre-triage questions to increase the early recognition of cardiac arrest. It has been estimated that up to 250 additional lives will be saved in England every year.

Changes to clinical standards

To ensure the ARP changes drive improved clinical outcomes, we will be introducing a new set of clinical indicators:

For serious **heart attack** patients, who have specific ECG changes, we will measure the proportion of patients that receive definitive treatment (balloon inflation during angioplasty at a specialist heart attack centre) within 150 minutes of making a 999 call. NHSE expect 90% of patients to meet this standard by 2022.

For **stroke patients**, we will measure the proportion of patients that complete their pathway of care (thrombolysis where appropriate, or first CT scan for those where it is not) within 180 minutes of making a 999 call – again with an expectation that 90% of patients will meet this standard by 2022, up from an estimated 75% of stroke patients currently completing their pathway of care within that timeframe.

ARP Barriers

Overall the evidence suggests that ARP is better for patients, systems and acute hospitals. However, since there will likely be a dramatically reduced number of fast response cars operating, hospital delays which consume DSA capacity will have an even more dramatic affect on the success of ARP in EEAST. Already we are modelling pressures in the first year of ARP due to the forecasted delays.



Current vs New Standards

Currently over half of all calls are classed as life threatening with an 8 minute response time target to be met in only 75% of cases. The other half of calls are deemed non-urgent with no national response target.

Response times for Green call patients have, unsurprisingly, doubled in some trusts in the last two years alone. Occasionally, the 8 minute target can increase response times; multiple vehicles are often dispatched to the same patient in a race to “stop the clock”. When calls where a patient’s needs only become known after the one minute has elapsed are factored in, one in four ambulances dispatched are now stood down before they reach the scene. Every year hundreds of thousands of patients fail to get an immediate response because ambulances are dispatched in a potentially illogical manner.

Current Standards

Category	Percentage of calls in this category	National Standard	How long does the ambulance service have to make a decision?	What stops the clock?
Red 1	3%	75% within 8 minutes	The clock starts at the point the call is connected to the ambulance service	The first ambulance service-dispatched emergency responder arriving at the scene of the incident
Red 2	47%	75% within 8 minutes	The earliest of: •The problem being identified •An ambulance being dispatched •60 seconds from the call being connected	The first ambulance service-dispatched emergency responder arriving at the scene of the incident
Green	50%	No national standard	The earliest of: •The problem being identified •An ambulance response being dispatched •60 seconds from the call being connected	The first ambulance service-dispatched emergency responder arriving at the scene of the incident

New Standards

Category	Percentage of calls in this category	National Standard	How long does the ambulance service have to make a decision?	What stops the clock?
Category 1	8%	7 minutes mean response time 15 minutes 90 th centile response time	The earliest of: •The problem being identified •An ambulance response being dispatched •30 seconds from the call being connected	The first ambulance service-dispatched emergency responder arriving at the scene of the incident (There is an additional Category 1 transport standard to ensure that these patients also receive early ambulance transportation)
Category 2	48%	18 minutes mean response time 40 minutes 90 th centile response time	The earliest of: •The problem being identified •An ambulance response being dispatched •240 seconds from the call being connected	If a patient is transported by an emergency vehicle, only the arrival of the transporting vehicle stops the clock. If the patient does not need transport, the first ambulance service-dispatched emergency responder arriving at the scene of the incident stops the clock.
Category 3	34%	120 minutes 90 th centile response time	The earliest of: •The problem being identified •An ambulance response being dispatched •240 seconds from the call being connected	If a patient is transported by an emergency vehicle, only the arrival of the transporting vehicle stops the clock. If the patient does not need transport the first ambulance service-dispatched emergency responder arriving at the scene of the incident stops the clock.
Category 4	10%	180 minutes 90 th centile response time	The earliest of: •The problem being identified •An ambulance response being dispatched •240 seconds from the call being connected	Category 4T: If a patient is transported by an emergency vehicle, only the arrival of the transporting vehicle stops the clock.



New Measures

Current standards apply to only half of the patients who dial 999, and are set at 75%; this means that one out of every four patients can miss the time target but meet the standard

ARP will set a standard at 90%, so 9 in 10 patients have to hit the target in order to meet the standard. ARP will also measure the mean average rather than median response times, so every single patient counts towards the time target.

A new set of clinical quality indicators will measure the time between the 999 call and receiving life-saving treatment for heart attack and stroke, as well as cardiac arrest survival. These will be followed by new measures for patients with sepsis, and people who have fallen and are still on the floor.

Call Handling

- Activity for calls and incidents
- Activity by category
- Call pick up
- Time to code C1
- Time to CPR (when cardiac arrest is confirmed)
- Hear & Treat

Operational Response

- C1 – C4 mean response time
- C1 – C4 90th percentile
- C1T – time to the arrival of a transporting vehicle when patient is transported
- Resource allocation rates

Clinical Assessment & Treatment

- Percentage of calls not conveyed to hospital
- STEMI 150 percentage
- STEMI care bundle percentage
- Cardiac arrest ROSC (Utstein) percentage
- Stroke 180 percentage
- Further sepsis targets to be agreed

Transport

- Percentage not transported
- Percentage transported to type 1 or type 2 ED
- Percentage transported to other facilities.

Our Internal Plan

5 key delivery work streams have been developed to sit beneath the over arching Programme Board.

These cover operational changes, EOC process changes & training, IM&T including reporting and intelligence and workforce engagement.

Specific or progressive updates from each of these groups is not possible due to the tight timeframe given by NHSE.

Feeding into the ARP Programme Board is the crucial outputs from the Independent Service Review (ISR) which will be critical to understanding how EEAST can map and use its resource over the coming 18 months.

We are also engaged with other services to gain advice and provide support on their progress.

EEAST will be implementing ARP on Tuesday October 17th.

