NHS
East Midlands
Ambulance Service
NHS Trust

Ambulance Response Programme: EMAS Pilot

Stakeholder Briefing

Background

Response times as a performance indicator for ambulance service has been in place since 1974, with the most recent revision in 1996 introducing variable standards for differing clinical needs and urgency. The rationale for this is based upon the relationship between time and clinical outcomes/survival for conditions such as community cardiac arrest or myocardial infarction.

However the 'Red' calls cover a much broader range of conditions within the 8 minutes response time. None of the available research demonstrates any significant positive relationship between shorter response times and a decrease in mortality for those with life threatening conditions other than out of hospital cardiac arrest.

This has led to a dichotomy of matching the right response to clinical need at the time of calling for help versus a need to also meet response time targets. This is often summarised as:

"An ambulance can arrive at the scene of cardiac arrest in 7.59 minutes but the patient does not survive and is considered a success but arriving after 8 minutes and the patient survives is considered a failure."

In response to this NHS England commissioned the Ambulance Response programme (ARP) with formal trial commencing in October 2015 to address these opposing priorities to improve the clinical response and outcomes.

East Midlands Ambulance Service were identified as a phase 2.3 pilot Trust prior to national adoption during Winter 2017. EMAS went live with ARP at 0230 on 19th July 2017.

Principles of the Ambulance Response Programme

ARP introduces 3 main changes to the current call coding, allocation and performance monitoring:

1. Introduction of new a new set of call categories replacing the current RED/GREEN, with new categories which will align clinical and resource requirements with AMPDS codes.
2. Further enhancement of despatch on disposition, incorporation of questions to immediately identify life threatening condition and for other conditions, allow longer for clinical triage to occur in order to ensure right resource is sent to the right patient in the right time.
3. Review of Ambulance Quality Indicators (AQI) to further drive clinical outcomes for patients.

NHS England have suggested that once these changes are fully adopted nationally:

- "Early recognition of life-threatening conditions, particularly cardiac arrest, will increase. Based on figures from London Ambulance Service, it is estimated that up to 250 additional lives could be saved in England every year."
- "Up to 750,000 patients every year would receive an immediate ambulance response, rather than joining a queue."
- "The differences in response time between patients living in rural areas and those in cities would be significantly reduced."

Changes to National Standards

Clinical Indicators:

- For serious heart attack patients, who have specific ECG changes, a 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. It is expected that 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.

Despatch Standards From:

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

To:

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 90th 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 90th 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 90th 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 90th 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.

Prepared By: Richard Lyne – Service Delivery Manager for Leicester, Leicestershire & Rutland.
8th August 2017.