



North East Ambulance Service **NHS**  
NHS Foundation Trust

# Driving Change in Urgent and Emergency Care

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Assistant Director

## Content

- Progress & improvements in NEAS
- Challenges still to overcome
- Performance
- New ambulance response standards

*ForLife*

## Driving change in urgent & emergency care

Animated video slide to play here.... 4 mins long

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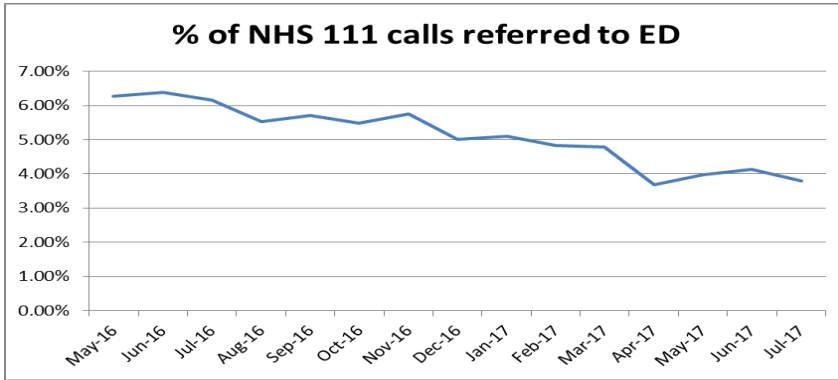
## Positive direction of travel

Volume	2013/14	2014/15	2015/16	2016/17	
Hear & treat	12,278	18,144	19,949	24,012	+ 11,734 (96%)
See & treat	80,133	81,990	85,021	92,141	+ 12,008 (15%)
See, treat & convey	389,367	302,009	295,213	290,093	- 99,274 (25%)
See & convey to ED	N/A	247,847	245,820	236,841	- 11,006(4%)

Despite change in demographics

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## Impact on NHS 111 Performance - Emergency Department Disposition Pathway

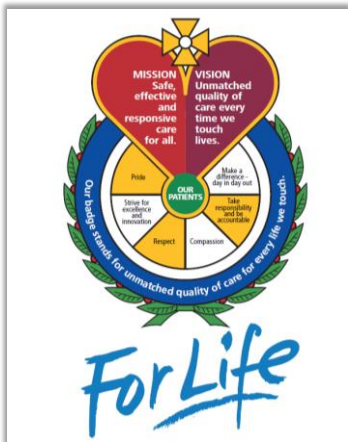


Baseline = 6%    Target = <5%    Stretch target = <3%



## Our mission, vision and values

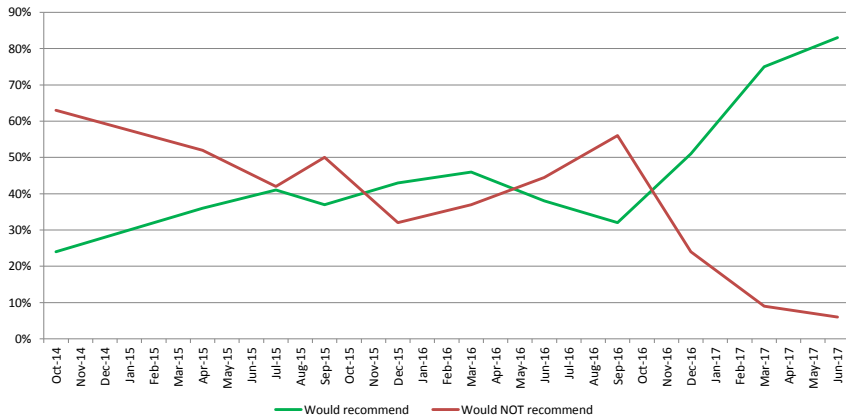
Driving our purpose and direction



**Our badge stands for unmatched quality of care for every life we touch. For Life.**

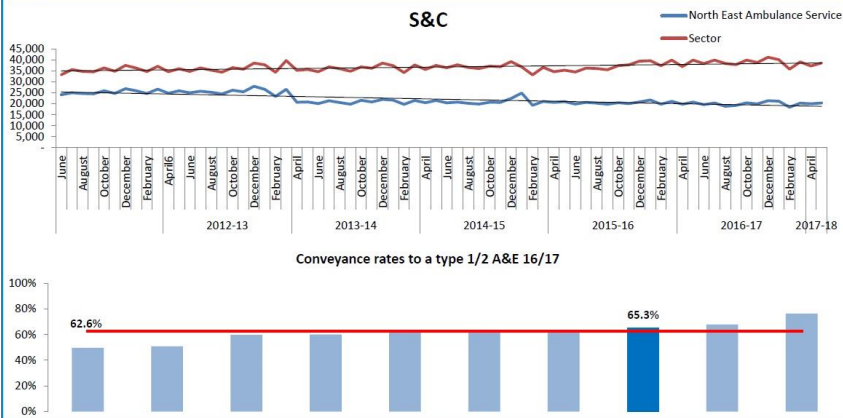


## Staff who would recommend NEAS as a place to work October 2014 to June 2017



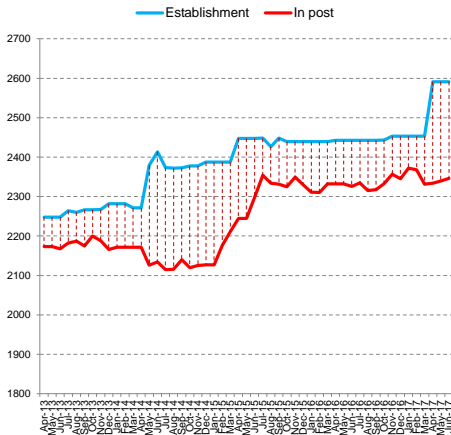
## Transportation to A&E

- There has been a linear increase across the sector in See and Convey rates between 2011 and 2017. The trust operated below the sector median during this time
- The trust operated at 65.3% conveyance during 16/17 which is above the sector median of 62.6%



# Workforce

## Closing the vacancy gaps



- ✓ Increased financial establishment for 2017/18:
  - 42 additional paramedics
  - 42 additional Emergency Care Technicians
  - Expanded Integrated Urgent Care Hub, with specialist staff that includes GPs
  - Additional Advanced Practitioners

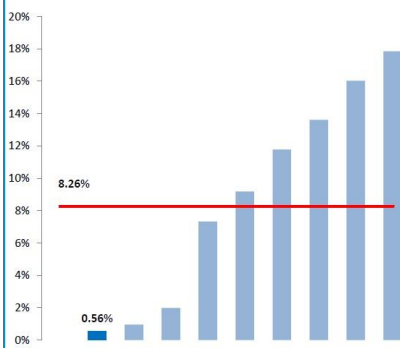


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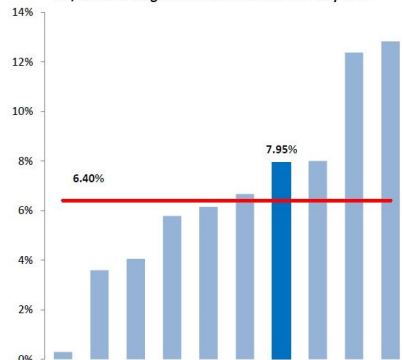
# Staff turnover & vacancies

- In month 3 17/18 staff turnover ranged across the sector between 0.56% and 17.85%. The trust operated at the second lowest in the sector during this time
- In month 3 17/18 staff vacancies ranged across the sector between 0.29% and 12.82%. The trust operated at 7.95% which is above the sector median during this time

17/18 Percentage of Month 3 All Staff Turnover



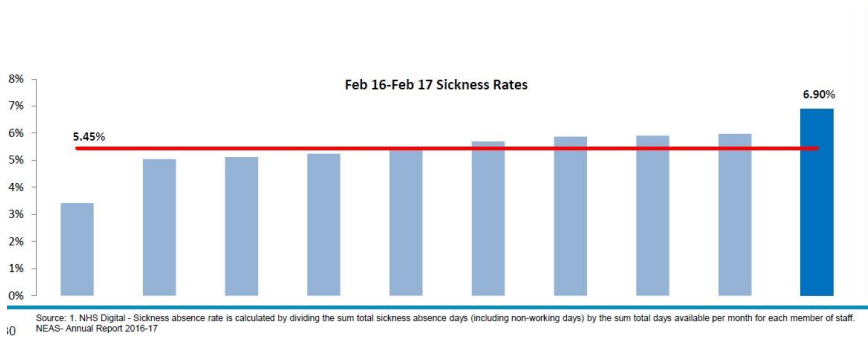
17/18 Percentage of Month 3 Overall Vacancy Rate



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# Sickness absence rates

- . We have introduced the following support mechanisms to help reduce staff sickness:
  - Sickness absence plan developed by the Executive Team
  - Objective is to achieve 5% target and maintain this
  - A business case for additional HR support has been approved
  - This issue is regularly reviewed at Trust Board meetings

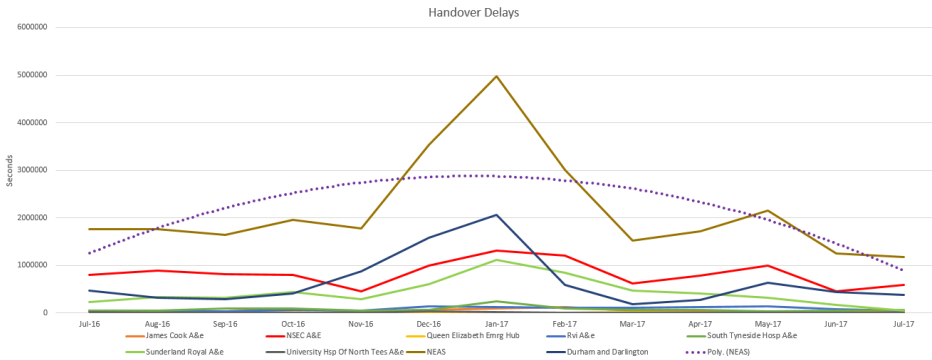


# Patient Friends & Family Test scores

- 93% of 111 patients rated their experience as very/fairly good
- 97% of 999 patients rated their experience as very/fairly good
- 91% of PTS patients rated their experience as very/fairly good



# Handover Delay



# Care Quality Commission rating

## November 2016



***“The North East Ambulance Service has a lot of to be proud of and there were clearly many areas of good practice.***

***We found a general culture of passion and enthusiasm at the trust and it was clear that everyone’s first priority was the patient.”***

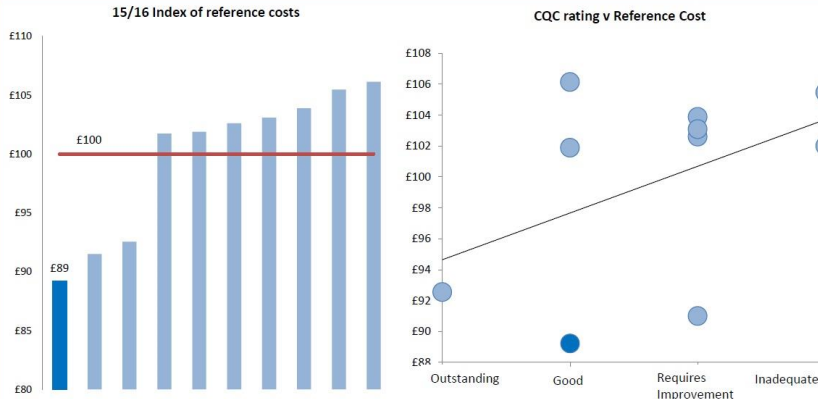
**Professor Sir Mike Richards  
Chief Inspector of Hospitals  
Care Quality Commission.**



# Context

## Reference costs and quality

- Reference costs indicate the cost-effectiveness of an NHS service. The below left graph shows the relative efficiency of the sector ranging from £89-£106. The trust operated at £89 during 15/16 which is the lowest in the sector
- Reference costs are benchmarked with overall CQC rating in the below right graph
- The trust are highlighted showing a CQC rating of "Good" and a reference cost of £89 in 15/16



# Income

## National Audit Office report - 2017

### Urgent and emergency income per head of population by NHS ambulance trust, 2015-16

In 2015-16, income per head of population varied by almost £10 per head across the ambulance trusts

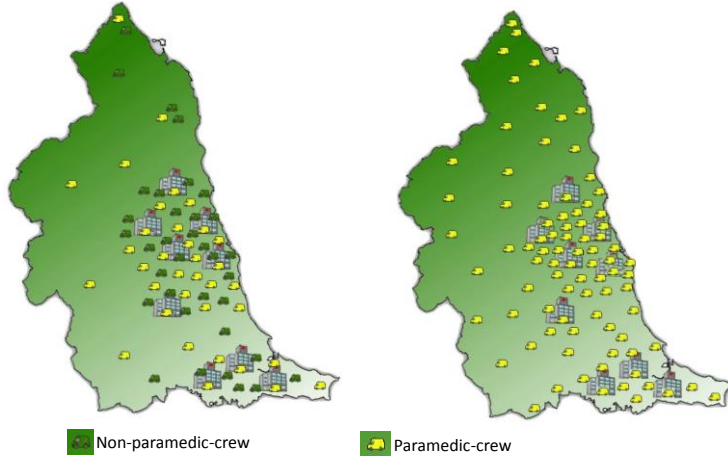




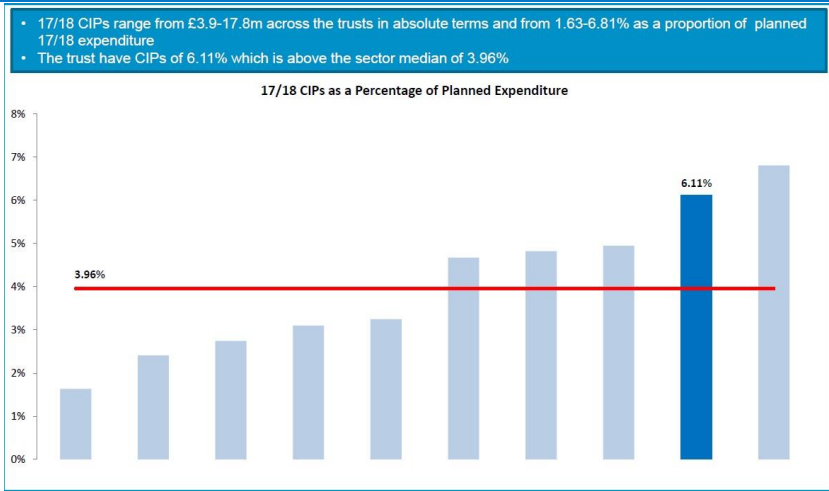
## Addressing the gap – progress to CQC Outstanding

Current NEAS representative cover & skill-mix

England-average representative cover & skill-mix



## Cost Improvement Plan



## Current response time standards

Call Type	Call definition	Response time	
Red 1	Time-critical life-threatening call	8 minutes in 75% of cases	19 minutes in 95% of cases
Red 2	Time-critical life-threatening call	8 minutes in 75% of cases	19 minutes in 95% of cases
Green 1	Serious clinical need	No standard	Aim to respond in 20 mins to any case
Green 2	Less serious clinical need	No standard	Aim to respond in 30 mins to any case
Green 3	Not an emergency	No standard	Aim to respond in 60 mins to any case
Green 4	Not an emergency	No standard	Telephone assessment and referral

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## Ambulance performance standards

*Professor Keith Willett, NHS England's Medical Director for Acute Care*

"Paramedics are rightly frustrated that under the current 'stop the clock' system they are frequently dispatched to simply hit targets.

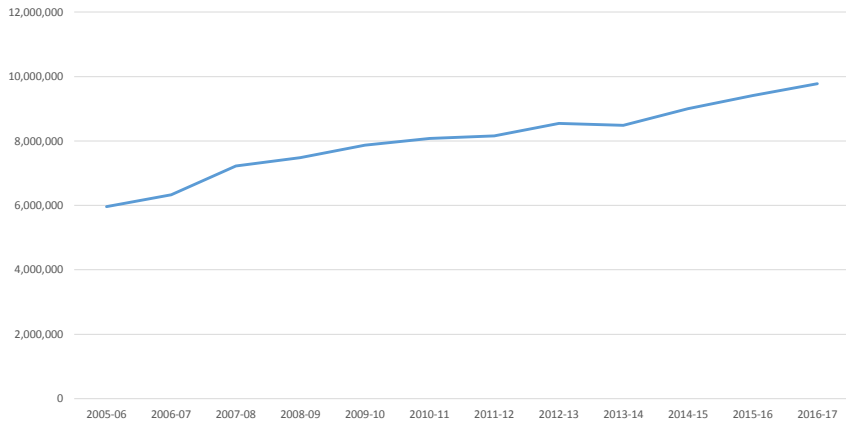
"This has led to the inefficient use of ambulances, with the knock-on effect of 'hidden waits'.

"This is about **updating a decades-old system** to respond to modern needs. In most 999 calls we know the best clinical outcome for patients is **most appropriate response**, not the fastest response

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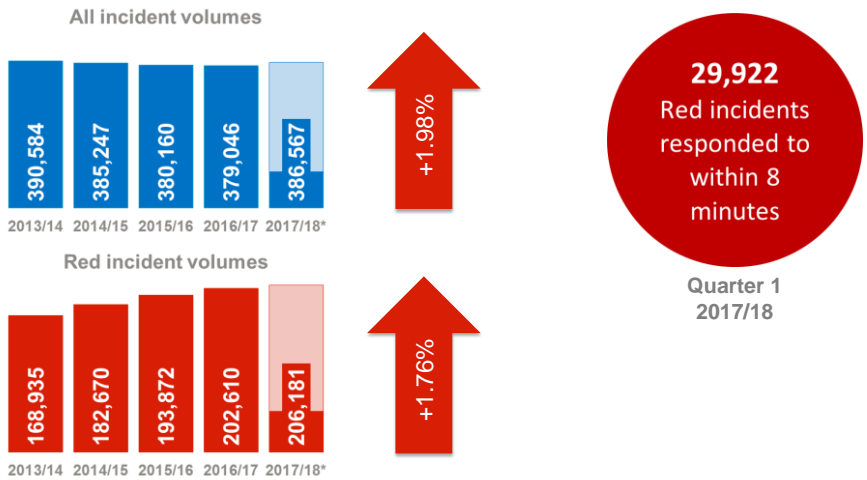
# Ambulance call volumes

## 2005/06 to 2016/17



# Our performance

## Emergency Care Services – incident volumes



\* Data provided shows actual volumes up to June 2017 and forecast volumes for the remainder of the financial year

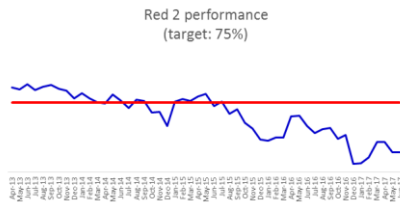
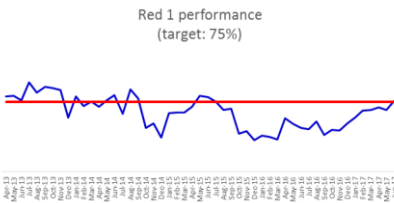
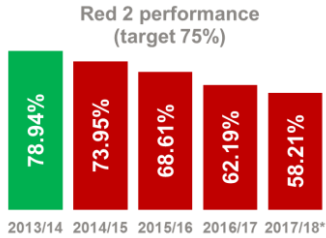
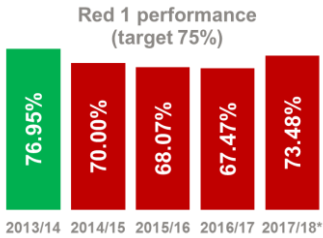
# Screen shot from clinical escalation

CSign	Type	Status	Location	Time	CS
BH477	Z P	AS (R2)(8376830)	Mbro	05:44	
CA295	Z P	AS (R2)(8376829)	Redcar	05:41	
CN286	Z P	VL (R2)(8376831)	James Cook A&E	05:45	
HS232	S* P	VM (R2)(8376844)	Mbro	05:36	
HS344	S* P	AS (R2)(8376807)	Hardpool	05:29	
MB315	Z P	AAS (R2)(8376881)	Mbro	05:45	
MB565	S* P	AS (R2)(8376816)	Skin O-T	05:20	
RC207	S* T	AS (R2)(8376827)	Newton East	05:25	
SM491	Z P	VL (R2)(8376786)	Uni Hosp Of North Te	05:42	
RR125	Z P	AS (R2)(8376807)	Hardpool	05:11	
RR134	Z P	AS (R2)(8376841)	Mbro	05:34	
RR176	Z RR	AAS (R2)(8376830)	Mbro	05:29	
RR129	Z RR	AS (R2)(8376829)	Redcar	05:26	
GP TEE	DE	B	Mbro	05:19	
FIRE GUI	FRS	RP	Guisborough	02:18	
FIRE SAL	FRS	RP	Saltburn-by-the-sea	20:53	
FIRE SKE	FRS	RP	Skelton-in-cleveland	13:30	
FIRE LOE	FRS	RP	Luftus	20:41	



## Our performance

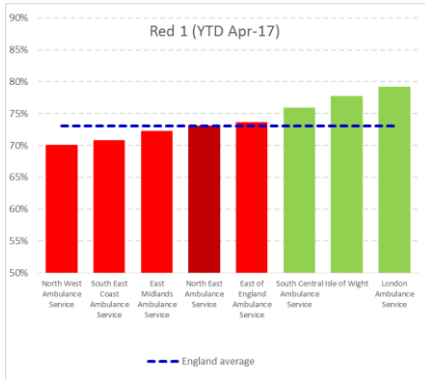
### Emergency Care Services – Red performance



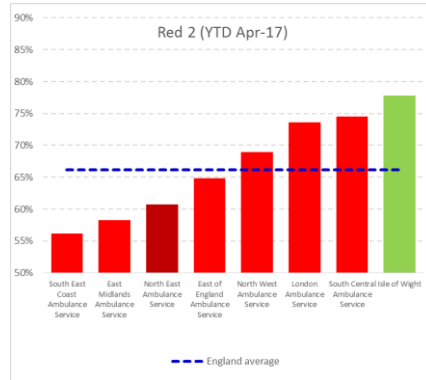
\* Data provided shows actual performance for Quarter 1 2017/18 and the full financial year for previous years **3** ForLife

## Our performance

### National Benchmarking



**Category R1 Performance**  
2017/18 YTD, as at Apr-17



**Category R2 Performance**  
2017/18 YTD, as at Apr-17

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## Ambulance Response Programme

**NHS**  
England

Established January 2015, the ARP aims to **increase the operational efficiency** of ambulance services and improving the **focus on patients' clinical need and outcomes**

- **“Nature of Call”** pre-triage
- **“Dispatch on Disposition”**
  - up to 240 seconds more
- A new, evidence-based, **code set**
  - South West, West Midlands and Yorkshire services
- New **clinically focussed** performance measures



## Why was an intervention needed?

### Ambulance response time-based standards in place since 1974

- Dispatching to a 999 call, on blue lights/sirens, **before determining problem**, and whether an ambulance is required
- Dispatching **multiple 999 vehicles to incident**, on blue lights/sirens, then standing down those least likely to arrive first
- **Diverting ambulance vehicles** from one call to another, staff focussing on time-standards, not patients needs
- **Using a “fast response unit” to “stop the clock”**, may provide little clinical value (stroke victim), then wait for a conveying ambulance
- **Long waits for lower priority (“green”) calls** that still need assessment and conveyance, some time-sensitive problems
- A perception that **ambulances tend to take longer to arrive in rural areas**

## 5YFV Delivery Plan – adoption of ARP

### Patients with life-threatening conditions, such as cardiac arrest, will receive the fastest response

- A more equitable and **clinically focussed response** that meets patient needs in an appropriate timeframe, with the best response for each patient including telephone advice treatment on scene or conveyance to hospital or alternatives
- **Better allocation and distribution of resources** in the face of rising demand, and an end to very long waits for an ambulance and handover delays at hospitals
- **Workforce development** paramedic re-banding and skills shift
- **New commissioning model** to support new model of care

*The Secretary of State for Health indicated that any proposed changes must be beneficial for patients, operationally efficient, and supported by a clinical consensus*

## 1. Dispatch on Disposition

- We gave **call handlers more time to assess 999 calls** that are not immediately life threatening before an ambulance vehicle is assigned to ensure that the right response is provided
- **3 questions added to the start of a 999 call** to ask about the patient's breathing and level of consciousness to ensure that immediately life threatening calls, particularly cardiac arrest, are identified very early in the call
- We tested these changes in a phased approach across the country between October 2015 and January 2017 and analysed **over 14 million calls**

## 2. Clinical Prioritisation of calls

- Ambulance calls are prioritised according to urgency described by the caller and **based on clinician consensus**
- Does not take account of the increasingly diverse and complex range of health problems
- We developed a new **evidence-based** system to prioritise 999 calls that **matched urgency and clinical needs to the best response**
- **Tested** this under carefully controlled conditions in **3 ambulance services** between April 2016 and January 2017

## Ambulance performance standards

### Benefits for patients and next steps

- Under the new system it is expected that:
  - early recognition of life-threatening conditions, particularly cardiac arrest, will increase.
  - The new targets should also free up more vehicles and staff to respond to emergencies.
- Next steps:
  - Modelling work to understand any changes required to working practices, staffing, estates, fleet etc.
  - Implement the new standards in December 2017
  - Formal performance monitoring by regulators from April 2018.

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## Ambulance Standards

Call type	Call definition	Average response time (100% of all cases)	90% response time
Category 1	Time-critical life-threatening event	7 minutes	15 minutes
Category 2	Potentially serious conditions	18 minutes	40 minutes
Category 3	Urgent problems not immediately life-threatening		120 minutes
Category 4	Non-urgent; needs telephone or face-to-face assessment		180 minutes
Specialist response	Hazardous area, specialist rescue, mass casualty.		

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## Ambulance Standards

Category	Definition	Time to take decision	What stops the clock?
1	Cardiac arrest; airway obstruction; unconscious with abnormal or noisy breathing; hanging. Mortality rates high; a difference of one minute in response time is likely to affect outcome and there is evidence to support the fastest response	The earliest of: <ul style="list-style-type: none"> <li>• The problem is identified</li> <li>• An ambulance response is dispatched</li> <li>• 30 seconds from the call being connected</li> </ul>	The first ambulance service-dispatched emergency responder arrives  There is an additional transport standard to ensure that these patients also receive early ambulance transportation

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## Ambulance Standards

Category	Definition	Time to take decision	What stops the clock?
2	Potentially serious conditions that may require rapid assessment, urgent on-scene intervention and/or urgent transport.  Mortality rates are lower; there is evidence to support early dispatch.	The earliest of: <ul style="list-style-type: none"> <li>• The problem is identified</li> <li>• An ambulance response is dispatched</li> <li>• 240 seconds from the call being connected</li> </ul>	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 arrives at the scene of the incident

## Ambulance Standards

Category	Definition	Time to take decision	What stops the clock?
3	<p>Urgent problem (not immediately life-threatening) that needs treatment to relieve suffering (e.g. pain control) and transport or assessment and management at scene with referral where needed within a clinically appropriate timeframe.</p> <p>Mortality rates are very low or zero; there is evidence to support alternative</p>	<p>The earliest of:</p> <ul style="list-style-type: none"> <li>• The problem is identified</li> <li>• An ambulance response is dispatched</li> <li>• 240 seconds from the call being connected</li> </ul>	<p>If a patient is transported by an emergency vehicle, only the arrival of the transporting vehicle stops the clock.</p> <p>If the patient does not need transport the first ambulance service-dispatched emergency responder arrives at the scene of the incident</p>

## Ambulance Standards

Category	Definition	Time to take decision	What stops the clock?
4	<p>Problems that are not urgent but need assessment (face to face or telephone) and possibly transport within a clinically appropriate timeframe.</p>	<p>The earliest of:</p> <ul style="list-style-type: none"> <li>• The problem is identified</li> <li>• An ambulance response is dispatched</li> <li>• 240 seconds from the call being connected</li> </ul>	<p>If a patient is transported by an emergency vehicle, only the arrival of the transporting vehicle stops the clock.</p>

# Arrival at a specialist heart centre

## NEAS Ambulance Quality Indicator results

Infographic Report In-depth Report

### 9. TREATMENT OF A HEART ATTACK – ARRIVAL AT A SPECIALIST CENTRE

This is a measure of the number of patients who have suffered a specific type of heart attack and need what's called a 'stent' fitted to free a blockage in their heart. This graph shows the percentage that were fitted with a stent at a specialist hospital within 2½ hours of their 999 call.



# Arrival at a stroke centre

## NEAS Ambulance Quality Indicator results

Infographic Report In-depth Report

### 11. STROKE – ARRIVAL AT STROKE CENTRE

Patients who have suffered a confirmed stroke can be eligible for treatment with a clot-busting drug. This is called stroke thrombolysis. This graph is a measure of the percentage of patients that arrived at a thrombolysis centre within 60 minutes of their 999 call.



## Independent analysis reported by Sheffield University explained their findings and made recommendations

The Ambulance Response Programme:

- ✓ **Giving call handlers more time to assess a call works;**
- ✓ The **most urgent** emergency calls **do not receive a slower response** when call handlers have this extra time available;
- ✓ The ambulance **services become more efficient and resilient**, and there **are less long waits** for an ambulance to arrive;
- ✓ Patients in **rural areas get a response more like urban areas**;
- ✓ In over 14 million 999 calls analysed **no patient came to harm** as a result of the ARP;
- ✓ Ambulance **staff agreed with the changes and recognised that they are beneficial to patients and to staff**



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