NHS England

Ambulance Response Programme

Stakeholder Reference Group

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What is the ARP?

The Ambulance Response Programme aims to increase operational efficiency whilst maintaining a clear focus on the clinical need of patients, particularly those with life threatening illness and injury.

We expect the programme to deliver improved outcomes for all patients contacting the 999 ambulance service, with a generally reduced clinical risk through:

- The use of a new pre-triage set of questions to identify those patients in need of the fastest response at the earliest opportunity (Nature of Call; NoC).

- Dispatch of the most clinically appropriate vehicle to each patient within a timeframe that meets their clinical need (Dispatch on Disposition; DoD).

- A new evidence-based set of clinical codes that better describe the patient's presenting condition and response/resource requirement.

National ambulance landscape

The English Ambulance Services comprise 10 individual NHS Ambulance Trusts (some Foundation Trusts):

North East Ambulance Service NHS Foundation Trust
Yorkshire Ambulance Service NHS Trust
North West Ambulance Service NHS Trust
West Midlands Ambulance Service NHS Foundation Trust
East Midlands Ambulance Service NHS Trust
South West Ambulance Service NHS Foundation Trust
South Central Ambulance Service NHS Foundation Trust
South East Coast Ambulance Service NHS Foundation Trust
London Ambulance Service NHS Trust
East of England Ambulance Service NHS Trust

Separate management arrangements are in place for the Isle of Wight.
The Welsh Ambulance Services NHS Trust which covers the whole of Wales.
The Scottish Ambulance Service which covers the whole of Scotland.
The Northern Ireland Ambulance Service Health and Social Care Trust which covers the whole of Northern Ireland.
The public ambulance services of the Isle of Man, Guernsey and Jersey, and the British Overseas Territory of Gibraltar.

How does it work?

NHS ambulance services

Ambulance services help many people with serious or life-threatening conditions, however they also provide a range of other urgent and planned healthcare and transport services.

Ambulance crews

Ambulance crews can include a range of staff, such as emergency care assistants and paramedics. An ambulance is equipped with a variety of emergency care equipment, such as defibrillators, oxygen, intravenous drips, spinal and traction splints, and a range of drugs.

Patients will always be taken to hospital when there is a medical need for this. However, paramedics now carry out more diagnostic tests and procedures at the scene. Many crews also refer patients to other health and social care services, and directly admit patients to specialist units such as stroke units.

Rapid response vehicle (car, motorbike or bicycle)

These units are often sent first as they can sometimes get through traffic more quickly.

Community First Responders (CFRs) and volunteers

Many ambulance services run volunteer responder schemes. Volunteers receive medical training and provide emergency care alongside ambulances or until an ambulance arrives. They are often trained to use defibrillators and provide CPR. Volunteers provide their own cars and usually don't have blue lights.

Non-emergency patient transport services (PTS)

Transport can encompass a range of vehicle types and levels of care consistent with the patient’s needs.

Ambulance standards

Handling 999 calls

Any 999 call to an ambulance service is prioritised to ensure life-threatening emergencies receive the quickest response:

1. Immediately life threatening

- Red 1: 75% of Category A Red 1 calls (the most time critical, where patients are not breathing or do not have a pulse) to be responded to within 8 minutes
- Red 2: 75% of Category A Red 2 calls (still serious, but less immediately time critical) to be responded to within 8 minutes.
- A19: 95% of all Category A calls to be responded to within 19 minutes.

2. All other calls – For conditions that are not life threatening (green calls), response targets are set locally

There are two systems of call prioritisation: AMPDS and NHS Pathways

The national context

Ambulance services are facing unprecedented demand; the number of Category A (Red 1 & Red 2) ambulances arriving at scene averaged 6,900 per day in 2011-12; 7,400 in 2012-13; 7,900 in 2013-14; and 8,600 in 2014-15. This demonstrates an increase of almost 25% between 2011-12 and 2014-15.

The national establishment of paramedics over the same period has remained almost static with 18,789 FTE in April 2012 and 18,949 FTE in July 2015. At the same time staff turnover in some areas is 75% higher than 2 years ago, with the College of Paramedics reporting an increase of 33% in stress related illness amongst its members. To compound the issue there is a national shortage of approximately 2,500 paramedics: around 13% of the current establishment.

Year	**Ambulance calls presented to switchboard** (excluding those passed from NHS111)
2011-12	8,157, 648
2012-13	8,544, 899
2013-14	8,485, 768
2014-15	9,001, 274

Why do we need to change?

Current time-based ambulance response standards, in the face of rising demand, have led to a range of operational behaviours that appear increasingly inefficient

Trusts tell us that 60 seconds to triage and dispatch a resource isn't enough time.

Specific issues :

- Dispatching resources to a 999 call, on blue lights and sirens, before it has been determined what the problem is, and whether an ambulance is actually required
- Dispatching multiple ambulance vehicles to the same patient, on blue lights and sirens, and then standing down the vehicles least likely to arrive first
- Diverting ambulance vehicles from one call to another repeatedly, so that ambulance clinicians are constantly chasing time standards
- Using a “fast response unit” to “stop the clock”, when this provides little clinical value to a patient (e.g. stroke), who then waits for a conveying ambulance
- Very long waits for lower priority (“green”) calls that nevertheless need assessment and conveyance to hospital

What do we need to change?

Key is the ability to send an appropriate vehicle with a skilled paramedic to the patients most in need in a timely manner. Those not requiring an emergency response can be dealt with through a ‘hear and treat’ consultation with a clinical advisor, a ‘see and treat’ consultation with a clinician, or referral to another service.

There is increasing awareness that ambulance services are not currently measured on those components of the service that reflect a patient-centred organisation, user experience and clinical outcomes.

The changes we would like to implement are ultimately about creating the best model to enhance patient outcomes, significantly improve user experience and reduce mortality by accurately prioritising those with the greatest need.

Long term interventions

NHS England is working alongside Health Education England to train the paramedics of the future.

An 87% increase in investment for training will deliver around 2,000 additional paramedics over the next five years, with the first tranche qualifying in 2016/17.

Paramedics form part of the overall ambulance workforce and so the Ambulance Workforce Working Group is reviewing the range of different staff groups, with different levels of qualification and regulation, which are directly or indirectly involved in the transportation and care of individual patients and service users in order to ensure an appropriately trained and skilled staff group.

Medium term interventions

The ARP is undertaking a review of the clinical coding of ambulance calls to:

- Review the codes that currently generate a Red 2 response to ensure that the most seriously ill patients receive the most appropriate clinical care in the timeliest fashion.
- Revise the definition of the A19 conveyance standard to ensure that where a patient requires transportation, that transport is of the correct type and arrives in a timely manner.
- The clinical coding review will incorporate evidence-based work on the most appropriate response for each possible disposition category (more than 4,000 in total), based on the following principles:

  - Life threatening calls will receive 2 or 3 resources to maximise clinical care. There will be a relatively small number of these calls each day;
  - Urgent calls will receive 1 vehicle of the correct type; and
  - “Hear and treat” cases will rarely require a conveying resource.

Immediate initiatives

The ARP is conducting a controlled pilot project with the aims of:

•Achieving faster dispatch to the most critical calls through the use of a pre-triage 'Nature of Call' series of questions

•Having resources more available (through less multiple allocations) to respond to life threatening immediate calls

•Utilising "Dispatch on Disposition" to allocate the most clinically appropriate resource to patients by taking a little more time to triage the call

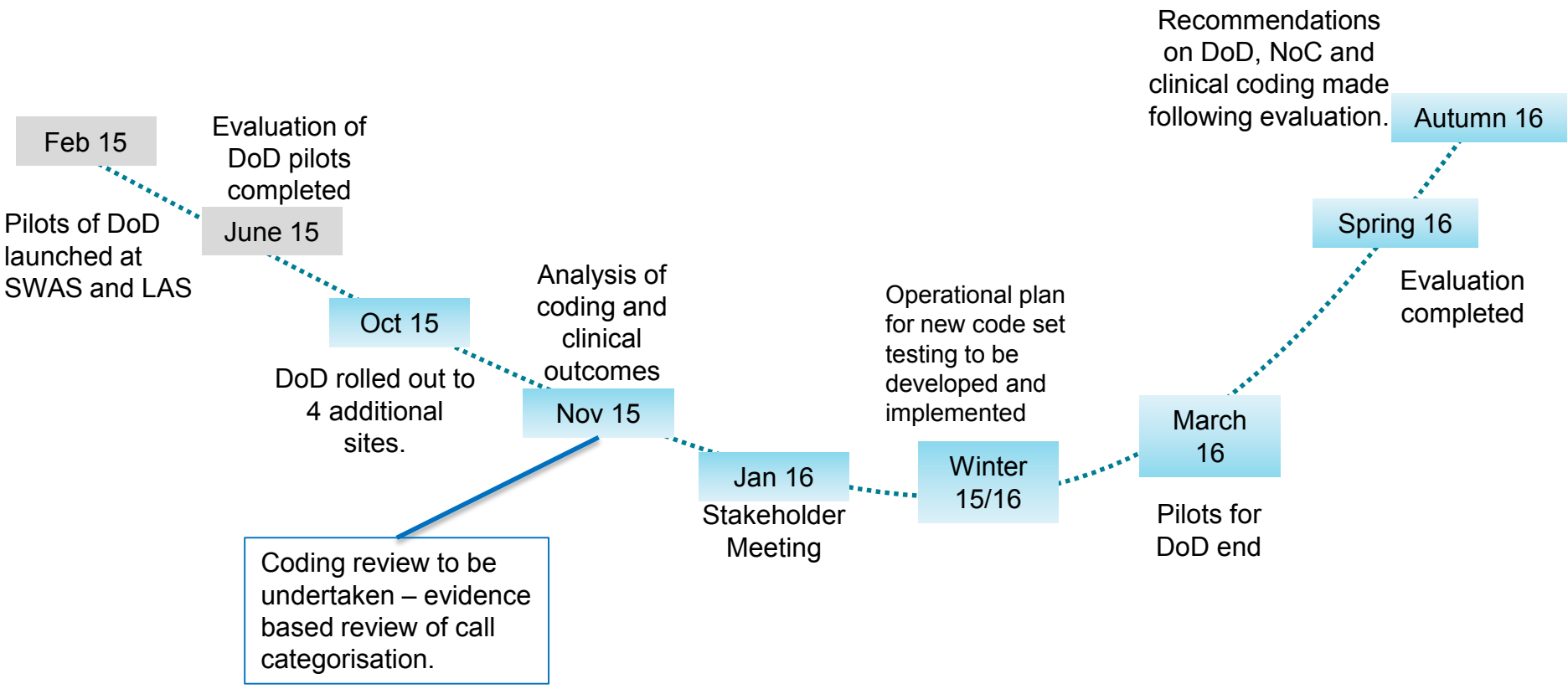
•Increasing the use of 'Hear & Treat' and 'See & Treat'

These changes allowed SWAST to free up to 20% of responding hours during the initial pilot period. The table below demonstrates improvements in vehicle allocation and rates of Hear and Treat over the initial pilot period.

Site	Change – vehicle dispatch rate per incident	Change – % calls resolved through hear and treat
SWAS South	5.7% decrease	56.9% increase
SWAS North	10.8% decrease	14.7% increase

When will we do this?

The Pilots of DoD and NoC will run from October 2015 to Summer 2016, with an independent evaluation by Sheffield University. Plans for testing a new code set to be developed in Winter 15



How do we know this is safe?

Expert Reference Group

- NHS England
- ScHaRR – as academic partners
- Association of Ambulance Chief Executives
- National Ambulance Commissioners Network
- College of Paramedics
- Representatives of trusts using Pathways and AMPDS

This group is currently meeting monthly

Operational Steering Group NHS England

- All ambulance trusts in England
- AACE
- College of Paramedics
- ScHaRR – as academic partners
- IT System experts

This group meets fortnightly

Stakeholder Group

Involvement from 43 organisations including:

- Unions
- Specialist groups:
  - Trauma
  - Cardiac
  - Stroke
- Charities
- Mental Health
- Social Services
- GPs
- Commissioners
- Patient Groups
- Public
- Staff engagement from ambulance trusts

This group will meet at key stages during the programme

Ministerial request

The ARP was established following a written ministerial statement on 16 January 2015 in which the Secretary of State agreed to an NHS England evaluation pilot to explore the way ambulance services respond to 999 calls, based on clinical advice.

The Secretary of State has requested a report on the Ambulance Response Programme by Summer 2016 insisting on:

- *A clear clinical consensus that the proposed changes are beneficial to patient outcomes as a whole, and act to reduce overall clinical risk in the system.*

- *Evidence from the analysis of Programme data that these changes have the intended benefits, and are safe for patients.*

- *Evidence of an associated increase in operational efficiency.*

Research and evaluation

Our academic partners at Sheffield University have built their evaluation around:

- Continuous monitoring of safety and incidents
- Quantitative elements to assess the impact of changes on operational performance and clinical service delivery
- Controlled before and after time series studies
- Trends in changes in identified processes and outcomes:
  - before the introduction of the ARP interventions
  - during the pilot phase
- Comparison to control sites to allow for the effect of potential confounders such as call volume fluctuations, seasonal effects and resource changes
- A two stage intervention – DoD followed by changes to call categorisation
- Qualitative elements to develop understanding of practical issues associated with implementing changes in associated work practices, using staff surveys

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