ASSOCIATION OF AMBULANCE CHIEF EXECUTIVES

NHS

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National framework for healthcare professional ambulance responses

Version 2, 22 March 2021

Differences between this document and the previous version – published July 2019 – are highlighted in yellow. These amendments take account of COVID-19 and oxygen saturation readings.

Contents

1. Introduction

This framework is intended for patients who require an ambulance response in a community setting following clinical assessment by a healthcare professional (HCP). The aim of this framework is to ensure:

- equity of access for all seriously ill or injured patients
- recognition that in certain situations, an HCP may require immediate clinical assistance to make a life-saving intervention, in addition to ambulance transportation
- consistent definitions for high acuity HCP responses are established and are mapped to Ambulance Response Programme (ARP) response priorities Category 1 and Category 2
- opportunity for local innovation and acknowledgement of different contractual and commissioning arrangements for lower acuity incidents
- activity and response to HCP incidents can be measured separately to other 999 activity to examine parity of response.

For the purposes of this framework, HCPs will be defined as those working in general practice, and advanced practitioners, paramedics, community matrons, community and district nursing teams, community midwifery teams, dentists and approved mental health professionals (mental health admissions only).

Patients who have immediate life-threatening injuries or illnesses must receive the same level of response in the community irrespective of the source of the 999 call.

HCPs in the community may require immediate clinical assistance from the ambulance service in addition to transportation in a timeframe appropriate to the patient's needs.

The following framework should be used so that individual systems can develop standard operating procedures and decision algorithms.

2. HCP ambulance response levels

A set of HCP response levels are described with a clear definition of the patient groups that would be allocated to each level. These levels are mapped to the current ambulance clinical categories and ambulance trusts are expected to respond to these requests in the same way as other 999 calls.

There are four levels of HCP response:

HCP Level 1 (HCP 1) Category 1 (7 minute mean response time)

This level of response should be reserved for those exceptional circumstances when an HCP requires immediate, **additional clinical assistance** from the ambulance service to treat a patient in need of immediate, life-saving intervention such as resuscitation.

These requests should be processed through the trust's 999 triage tool and only those that are deemed Category 1 under that assessment should receive a Category 1 response.

Examples in this category would include cardiac arrest, anaphylaxis, life threatening asthma, obstetric emergency, airway compromise and cardiovascular collapse (including septic shock). It would be expected that, predominantly, the HCP would be with the patient; however, in exceptional circumstances they may not be (for example, relatives call a GP's surgery for a patient in cardiac arrest).

While these calls may be flagged within the trust computer aided dispatch (CAD) system as being from an HCP (for ambulance quality indicator [AQI] reporting purposes), they must be presented and displayed in the trust CAD system in the same way as Category 1 calls from the public and responded to accordingly.

HCP Level 2 (HCP 2) Category 2 (18 minute mean response time)

This level of response is based on the clinical condition of the patient and their need for immediate additional clinical care in hospital – in an emergency department or acute receiving unit (ie medical or surgical assessment unit, delivery suite).

Patients with a National Early Warning Score (NEWS2) of 7 or greater may trigger a request for this level of response, as may the opinion of an HCP who has assessed the patient.

Patients with a NEWS2 of 6 or less may be suitable for an HCP Level 2 response by exception only; and HCPs should detail the clinical reason where possible. Examples in this category may be patients with sepsis, myocardial infarction, CVA, acute abdomen, acute ischaemic limb, acute pancreatitis, major gastrointestinal haemorrhage and overdose requiring immediate treatment. In addition, COVID-19 patients with potential silent hypoxia should also be allocated this level of response.

While these calls may be flagged within the trust CAD system as being from an HCP (for AQI reporting purposes), they must be presented and displayed in the trust CAD system in the same way as Category 2 calls from the public and responded to accordingly.

HCP Level 1 and Level 2 incidents are confirmed emergencies which require life-saving intervention and should be responded to as time critical emergencies and immediately allocated the nearest appropriate resources.

HCPs requesting a Level 1 or 2 response are recommended to remain with the patient if possible, until the arrival of the emergency ambulance (where they are at the scene) to hand over the patient to the attending ambulance clinician.

If an ambulance is not immediately available for dispatch to an **HCP Level 1 or Level 2 call** this incident should be escalated within the ambulance operations centre to ensure an appropriate response.

Ambulance trusts should have appropriate clinical support and decision making processes in place for HCP requests requiring escalation. Clinical discretion should be applied in some cases where the patient's condition does not precisely meet the definition, but additional considerations are involved, such as with end of life care.

In the case of an HCP Level 1 incident, ambulance trusts should consider whether an HCP request requires a solo responder in addition to an emergency ambulance (ie where the closest resource is a solo responder or the closest emergency ambulance crew are not a paramedic crew).

There should be little or no variation in the proportions of the above categories across England.

HCP Level 3 (HCP 3) locally commissioned response

This level may be commissioned for patients who require urgent admission to hospital. Examples in this category may be patients who require urgent investigations to inform ongoing care such as CT, MRI, ultrasound or who need an urgent assessment by a specialist. Mental health emergency admissions and patients with respiratory conditions, or suspected fractures (not due to major trauma) are examples that may be suitable for a Level 3 response.

Where this is commissioned a response timeframe of within two hours' arrival at the patient (90th centile) should be applied. This includes the option for both 1 and 2 hour responses (where commissioned).

HCP Level 4 (HCP 4) locally commissioned response

This is for all other patients who do not fit the above definitions and require admission to hospital by ambulance for ongoing care but do **not** need to be managed as an emergency. Examples in this category may be patients being admitted directly under specialty teams as well as those being transported to emergency departments for further investigation who do **not** require emergency investigation or treatment immediately upon arrival.

Where this is commissioned a set timeframe of within a four hour response arrival at the patient (90th centile) should be applied.

2.1 General notes

Where immediate ambulance clinical support and/or transportation is requested by an HCP, it is the responsibility of the attending clinician to make the request to the ambulance trust. It is highly desirable that, if possible, the clinician should not delegate this responsibility – experience has shown that a clear transfer of information is needed.

Where delegation is unavoidable, the individual making the request for support should be able to answer triage questions about the patient's condition, including the transfer of information regarding the patient's history, overall condition and vital

signs. HCP Level 1 or HCP Level 2 requests should ordinarily be made by an HCP unless clinical factors require the call to be made by non-clinical staff. However, where calls are made by non-clinical staff on behalf of an HCP, these should be handled in exactly the same way.

In situations where systems operate a 'bed bureau' arrangement and organise ambulance transport on behalf of HCPs, these organisations must have in place the correct procedures to provide all clinical information including, where available, NEWS2 scores. HCP Level 1 and 2 incidents are not suitable to be requested via a bed bureau arrangement.

HCPs can aid the efficient deployment of ambulances by being familiar with this framework. Equally, ambulance trusts have a responsibility to ensure appropriate clinical support in control rooms and on scene for HCPs dealing with patients with emergency conditions.

Alternatives to conveyance by ambulance (eg local taxi service) are a matter for local determination and do not form part of this framework.

2.2 Question order for HCP requests

Call answer

Where the caller identifies themselves as an HCP (in line with the above definition) either via 999 or a dedicated HCP number, call takers must ask question 1 as set out below. It is acknowledged that depending on different CAD / triage systems, Trusts may need to ask other questions prior to entering the framework such as address verification.

<<<< Entry point into HCP Framework >>>>

Q1 Do you need our clinical help right now to deliver an immediate life-saving intervention or are you declaring an obstetric emergency?

If **YES** – Process through trust 999 Triage procedure (AMPDS, NHS Pathways) including use of pre-triage sieve and nature of call.

- Where the call codes as an HCP Level 1 (Category 1) response in triage, resources to be allocated as appropriate.
- Where the call codes as an HCP Level 2 (Category 2) response in triage, resources to be allocated as appropriate (see note below if declared obstetric emergency).
- Should the call code **lower than an HCP Level 2 (Category 2) response**, trusts should ensure local policy and procedures exist to immediately flag the call, upgrading if appropriate.
- All declared obstetric emergencies **not** coding as an HCP Level 1 (Category 1) response should be upgraded to an HCP Level 1 (Category 1) response.

If **NO** – Go to Q2a for adults (16 years and over) and not pregnant, or Q2b for patients under the age of 16 and/or pregnant.

Q2a (if 16 years or over and **not** pregnant)	**Q2b** (if less than 16 years of age and/or pregnant)
Is there a threat to life, limb or sight requiring immediate emergency admission?	
For example: patient with chest pain and a likely diagnosis of acute coronary syndrome, unstable arrhythmia, stroke, acute pancreatitis, acute ischaemia of a limb, suspected pulmonary embolus with respiratory distress, oxygen desaturation in COVID-19 ≤92% or mental health crisis where the patient is being restrained. If **YES** – go to **Q3** If **NO** – go to **Q4b**	For example: patient with chest pain and a likely diagnosis of acute coronary syndrome, unstable arrhythmia, stroke, acute pancreatitis, acute ischaemia of a limb, suspected pulmonary embolus with respiratory distress or mental health crisis where the patient is being restrained. If **YES** – respond as **HCP Level 2 Category 2** response – closest appropriate emergency ambulance to be dispatched immediately. If **NO** – go to **Q4b**

Q3 What is the patient's NEWS2 score?

- **If 7 or greater**: respond as **HCP Level 2 (Category 2)** response – closest appropriate emergency ambulance to be dispatched immediately.
- If **5 or 6** and the diagnosis is potential sepsis (or meningitis): respond as HCP Level 2 (Category 2) response (see notes in NEWS2 table below).
- **If less than 7** (or for sepsis/meningitis, **less than 5**) or **UNKNOWN**: Go to Q4a.

2.3 National Early Warning Score (NEWS)2

All patients aged 16 years and over and not pregnant requiring an HCP Level 2 emergency ambulance response are, wherever possible, to have their vital signs measured. For example, the patient's pulse oximetry, blood pressure (or if necessary, capillary refill time), respiratory rate, temperature, pulse rate and conscious level.

This information should be communicated to the ambulance dispatch when requesting an ambulance. If possible, the patient's NEWS2 score is to be calculated, recorded and handed over to ambulance clinicians, and again upon arrival in the receiving unit.

Patients with suspected sepsis and a NEWS2 score of 5 or more should be offered an HCP Level 2 (Category 2) response as this predicts at least a twofold increase in the risk of adverse outcomes.[1]

NEWS2 should not be used in children (ie aged <16 years) or in women who are pregnant. NEWS2 may be unreliable in patients with spinal cord injury.[2]

[1] Joint Royal Colleges Ambulance Liaison Committee (JRCALC), 2017. *JRCALC Clinical Practice Supplementary Guidelines*. Bridgewater: Class Professional Publishing: https://aace.org.uk/clinical-practice-guidelines/

[2] Royal College of Physicians, National Early Warning Score (NEWS) 2: *Standardising the assessment of acute-illness severity in the NHS*, 2017. Updated report of a working party. London: RCP. Available online from https://www.rcplondon.ac.uk/file/8504/download

National Early Warning Score (NEWS2)

Physiological parameter	Score 3	2	1	0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25
SpO_2 Scale 1(%)	≤91	92–93	94–95	≥96			
SpO_2 Scale 2(%)	≤83	84–85	86–87	88–92 ≥93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen
Air or oxygen?		Oxygen		Air			
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220
Pulse (per minute)	≤40		41–50	51–90	91–110	111–130	≥131
Consciousness				Alert			CVPU
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1	

Royal College of Physicians

Q4a: **Is there a clinical reason as to why an emergency ambulance must be dispatched immediately?**	**Q4b:** **We will be with the patient within the next four hours; however, we may arrive sooner and therefore the patient must be ready to travel. Is this arrangement acceptable?**
If **YES**, request HCP specifies the clinical reason and code **HCP Level 2 (Category 2) response** – closest emergency ambulance to be dispatched immediately. Trusts may wish to refer these cases to an EOC clinician for review. *Oxygen desaturation in COVID-19 patients – see next page. If **NO**, call taker advises: **We will be with the patient within the next four hours; however, we may arrive sooner and therefore the patient must be ready to travel. Is this arrangement acceptable?**	**Accepted** by HCP: call coded as HCP4 4-hour response. **Not accepted** by HCP: Trusts will agree with the HCP a clinically suitable timeframe between 1 and 3 hours as guided by the HCP depending on commissioning arrangements. 1 or 2 hour responses must be mapped to an HCP 3. 3-hour responses must be mapped to an HCP 4.

Accepted by HCP: call coded as HCP4 4-hour response. **Not accepted** by HCP: Trusts will agree with the HCP a clinically suitable timeframe between 1 and 3 hours as guided by the HCP depending on commissioning arrangements. 1 or 2 hour responses must be mapped to an HCP 3. 3-hour responses must be mapped to an HCP 4.	

Trusts should ensure that they have arrangements in place to capture the patient's NHS Number

NOTE: *COVID-19 patients who have an oxygen saturations reading of ≤92%, or a reduction in oxygen saturations of 5% from their usual, should be allocated a Category 2 response as a specific clinical reason where this is offered by the HCP in response to Q4a.

3. Reporting

Ambulance trusts should be able to report HCP Level 1 to 4 requests separately from core 999 emergency activity. Please refer to the Ambulance System Indicators guidance: https://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/

NHS commissioners and ambulance trusts should jointly audit compliance with this framework.

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