Which patients should be pre-alerted? A review of UK ambulance service guidelines

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Introduction

- Pre-alert calls made by ambulance clinicians make the receiving emergency department (ED) of the imminent arrival of critically unwell or deteriorating patients.
- Patient presentations requiring a pre-alert are varied, but may include abnormal physiology (e.g ⇓GCS) and time-critical presentations e.g acute stroke and STEMI
- Over or inappropriate use of pre-alerts may lead to pre-alerts not being responded to appropriately, and diverts resources from critically unwell patients
- We undertook an appraisal of ambulance service guidance on pre-alerts to explore how the guidance differs between services and national pre-alert guidance.

Methods

- Contacted all 19 UK ambulance services and asked for latest pre-alert guidance.
- Summarised the clinical conditions, terminology and physiological thresholds listed by each ambulance service
- Compared to RCEM/AACE guidelines (2021).

Implications

- Variation in terminology could cause confusion for ED's that receive pre-alerts from multiple ambulance service.
- Differing pre-alert thresholds for pre-alerting can cause variations in care.
- Policies should focus on clinical care, not processes.
- Tools should complement policies to assist clinicians in the decision to make a pre-alert.

Results

- Responses from **15/19** Ambulance Services.
- **2** services reported that they had no specific pre-alert guidance.
- **1** service had policies regarding the **process** of pre-alerts only (No clinical conditions listed).
- **2** services were unable to locate guidance relating to presentations requiring a pre-alert.
- **1** service exclusively utilised the AACE/RCEM guidance.
- Between **4-45** different conditions listed
- Significant inconsistencies in the criteria for pre-alerts and the language and terminology used, even with known care pathways
- Variation in physiological thresholds for pre-alerts.

	RCEM/AACE	East of England	London	North West	South Central	South Western	West Midlands	Yorkshire	Welsh
Conditions matched with RCEM/AACE Guidelines	-	3/23	4/23	6/23	10/23	7/23	19/23	10/23	10/23
Respiratory Rate				<10 or >30 for adults	Abnormal breathing rate of irregular breathing pattern (e.g. Cheyne Stokes Breathing)	<10 or ≥29 (for adults)	≤8 or ≥25	≤8 or ≥25	
Chest Pain	ST elevation MI Complete heart block or broad complex tachycardia with adverse features (shock, syncope, heart failure, myocardial ischaemia)		Current cardiac chest pain with abnormal ECG (e.g. heart block, BBB)	STEMI, or Cardiac Chest pain where cardiac cause is suspected	STEMI, or patients with signs of cardiogenic shock	STEMI or circulatory compromise	STEMI or incomplete heart block	STEMI	ST Elevation indicative of an MI for early thrombolysis, or haemodynamically unstable with signs and symptoms of shock.
Stroke	FAST-positive stroke within timeframe for thrombolysis	Use BE-FAST standardised framework	Any new limb weakness, speech impairment, sudden change in behaviour, FAST +ve	New stroke with symptom onset of no more than 4 hours	Acute stroke (FAST positive) including sub-arachnoid haemorrhage	FAST positive stroke	FAST positive and within time frame for thrombolysis	FAST positive	-
Level of Consciousness	Unconscious with a GCS motor score of less than 4	-	Reduced ACVPU	GCS <8	P/U on ACVPU scale, or injured with GCS Motor Score <4	GCS <14	Unconscious with GCS Motor Score <4		Trauma patients with GCS <9 or fall of >2 since patient contact. Medical patients – unconscious

This project is funded by the National Institute for Health Research (NIHR HS&DR 131293).
The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

* Table omits services with no conditions matching with AACE/RCEM guidance