

Katy Thorne KC  
Assistant Coroner, Berkshire

By Email: [REDACTED] and [REDACTED]  
Our reference: [REDACTED]

14th December 2022

Dear Ms Thorne

**NHS Digital Response to Prevention of Future Deaths Report - Inquest touching the death of Levi Louis Alleyne**

I am writing in response to the Prevention of Future Deaths Report received from HM Coroner, dated 4<sup>th</sup> November 2022. This follows the death of Levi Louis Alleyne who sadly passed away on 16 November 2020. This was followed by an investigation and inquest which concluded on 3rd October 2022. NHS Digital were not aware that this inquest was occurring, and therefore we did not have the opportunity to provide information to assist your inquiry.

Firstly, I would like to offer my sincerest condolences to the family of Levi Alleyne.

I am [REDACTED] and am writing in my capacity as Clinical Director, NHS Pathways, NHS Digital.

NHS Pathways is the clinical decision support software (CDSS) used by all 111 service providers, and some 999 ambulance trusts in England. For information, we have included a short summary of the functions that NHS Pathways performs and the governance that underpins it (containing background information on NHS Pathways) in Appendix A.

HM Coroner has raised a number of matters of concern in the Regulation 28 Report. None of these directly reference NHS Pathways, but we believe concerns 4 and 5 are the most applicable. We have set out below relevant information about NHS Pathways, and NHS Digital's role.

## **1) Standard operating procedures and DNO contact numbers**

NHS Pathways remit does not extend to preparing or overseeing local or national standard operating procedures or providing national oversight of 111 or 999 operations. Standard operating procedures relating to a range of operational requirements are locally set by 111 and 999 providers. NHS Pathways is a clinical decision support system and more operationally focused content such as how to contact a utility provider sits outside the remit of the NHS Pathways system.

## **2) NHS Pathways assessment of electrocution, including where there are scene safety concerns**

NHS Pathways is a clinical triage system which provides the means to assess a patient's clinical presentation at the time of the call and signposts to the care skill set and time frame that a patient requires at that point in time. There are 2 main routes within the NHS Pathways system where electrocution from a non-domestic hazard (such as overhead power lines) can be identified:

- 1) following identification of cardiac arrest, which leads straight to a Category 1 ambulance disposition being reached, the system seeks to establish if the scene is safe. If a negative ('no') response is given the 'unsafe' route asks whether an electrical hazard is present.
- 2) via the major trauma route in Module 0, if it has been identified that the patient is conscious (as occurred initially with the deceased in this case). The route asks questions about the nature of the trauma and if the option for 'electrical injury' is selected the NHS Pathways system asks whether the shock was caused by a non-domestic supply. If so this generates a Category 2 ambulance.

Following either of the above routes being followed the NHS Pathways system makes a further assessment of scene safety. If 'the scene is unsafe' is selected, this prompts identification of an electrical hazard. There is further questioning about whether the electrical hazard has been made safe. In the case of a non-domestic electrical hazard that hasn't been made safe, further advice presents where the caller is advised;

- Not to put themselves at risk
- Not to go closer than 20 yards as high voltage electricity can jump
- Keep away from liquid spills, wet floors and puddles due to the conduction of electricity in water.

There are also system prompts for the Health Advisor to consider whether the situation also requires the attendance of other emergency services for any type of electrical hazard that has the potential to make the scene 'unsafe'. Although such tragic incidents are rare, NHS Pathways are fully supportive of identifying any further learning from this case and are currently reviewing the scene safety elements within the triage system. The initial discovery has commenced, and any identified changes would be subject to review and sign off from the National Clinical Assurance Group and, if relevant, from the Emergency Call Prioritisation Advisory Group (ECPAG). The purpose of the ECPAG is to advise NHS England and Department of Health & Social Care (DHSC) on issues of ambulance call prioritisation. Its principal remit is to recommend which disposition codes should be mapped to which ambulance responses. The group consists of membership from Association of Ambulance Chief Executives (AACE), College of Paramedics, NHS England, DHSC, NHS Digital, AMPDS, National Ambulance Commissioning Network (NACN), NASMeD and ambulance Heads of Control.

## Conclusion

- NHS Pathways assesses symptoms presented at the time of the call and signposts to the care skill set and time frame that a patient requires at that point in time. NHS Pathways identifies electrical hazards and advises callers on scene safety.
- NHS Pathways remit does not extend to preparing or overseeing local or national standard operating procedures or providing national oversight of 111 or 999 operations.
- The NHS Pathways content is continually under review to take account of clinical issues, user feedback, the latest available data and evidence, guidelines from Royal Colleges and other respected bodies and Coroner feedback. Any changes to NHS Pathways clinical content are overseen by the National Clinical Assurance Group and Coroner referrals are submitted to the National Clinical Assurance Group as a standing agenda item.

NHS Digital takes its role in such enquiries and any Prevention of Future Deaths Reports received very seriously. I would like to take this opportunity again to offer my sincere condolence to Levi Alleyne's family. If I can be of any further assistance, please contact me.

Yours sincerely

  
Clinical Director  
NHS Digital

## Appendix A

### Function of NHS Pathways

NHS Pathways is a telephone and digital triage Clinical Decision Support System (CDSS) that has been in use since 2005 within the Urgent and Emergency care setting. It is used in all NHS 111 and half of English ambulance services. This triage system supports the remote assessment of over 20 million calls per annum.

NHS Digital is the Health and Social Care Information Centre (a non-department public body) as detailed in Part 9, Chapter 2 of the Health and Social Care Act 2012. The NHS Pathways system is owned by the Department for Health and Social Care, commissioned by NHS England and developed and managed by NHS Digital; the NHS Pathways team is part of NHS Digital.

Calls using NHS Pathways are managed by non-clinical specially trained 'Health Advisors' who refer the patient into suitable services based on the patient's health needs at the time of the call. The Health Advisors are supported by clinicians who can provide advice and guidance or who can take over the call if the situation requires it.

The system is built around a clinical hierarchy, meaning that life-threatening symptoms are assessed at the start of the call triggering ambulance responses, progressing through to less urgent symptoms which require a less urgent response (or disposition) in other settings. NHS Pathways is not a diagnostic system and only assesses symptoms presented at the time of the call and signposts to next level of care.

NHS Pathways is an interlinked series of algorithms, or pathways, that link questions and care advice leading to clinical endpoints known as "dispositions". The system presents a series of questions in order that the most appropriate clinical response or disposition may be determined based on the answers given. A disposition will specify the skill set and time frame that a patient requires. The system triages both injury and illness presentations for all age groups (neonate, infant, toddler, child, and adult). In addition, special populations are included where relevant to the triage e.g., pregnancy.

The NHS Pathways system was developed and maintained by a group of experienced NHS clinicians (clinical authors) with an Urgent and Emergency Care background. The NHS Pathways clinical authoring team come from a variety of clinical backgrounds and are either a paramedic, nurse or doctor who are registered, licensed practitioners.

## Governance of NHS Pathways

The safety of the clinical triage process endpoints resulting from a 111 or 999 assessment using NHS Pathways, is overseen by the National Clinical Assurance Group, an independent intercollegiate group hosted by the Royal College of General Practitioners. This group is made up of representatives from the relevant Medical Royal Colleges. Senior clinicians from the Colleges provide independent oversight and scrutiny of the NHS Pathways clinical content. The group considers all aspects of the triage process, including the impact on services, as well as the evidence base for changes to the clinical content. All changes to, and development of, the core telephone system and other platforms, are formally documented and presented for a critique by a group of authors. This includes both purely clinical elements, but also an appraisal of the operational impacts on NHS Pathways users and on providers' services.

Alongside this independent oversight, NHS Pathways ensures its clinical content and assessment protocols are consistent with the latest advice from respected bodies that provide evidence and guidance for clinical practice in the UK. This includes latest guidelines from:

- a. NICE (National Institute for Health and Clinical Excellence);
- b. The UK Resuscitation Council; and
- c. The UK Sepsis Trust.

Safe and appropriate use of NHS Pathways by NHS care providers is governed by way of a 'Licence to Use'.

NHS Pathways welcomes user feedback to help improve the system. The License to Use details how serious incidents, near misses, requests for change, suggestions for enhancements and inquests or Prevention of Future Deaths Reports relevant to NHS Pathways should be reported to NHS Digital via the NHS Pathways authoring tool (in redacted form). Such clinical enquiries are given a priority grade and reviewed and responded to accordingly. All providers have access to the log and can see all enquiries raised.