

Ms Joanne Andrews
Area Coroner
West Sussex, Brighton and Hove
The Coroner's Office
Woodvale
Lewes Road
Brighton
BN2 3QB

National Medical Director
NHS England
Wellington House
133-155 Waterloo Road
London
SE1 8UG

[REDACTED]
24 December 2024

[REDACTED]
Dear Coroner,

Re: Regulation 28 Report to Prevent Future Deaths – Joel Phillip Colk who died on 2 October 2023

Thank you for your Report to Prevent Future Deaths (hereafter "Report") dated 13 November 2024 concerning the death of Joel Phillip Colk on 2 October 2023. In advance of responding to the specific concerns raised in your Report, I would like to express my deep condolences to Joel's family and loved ones. NHS England are keen to assure the family and the Coroner that the concerns raised about Joel's care have been listened to and reflected upon.

In your Report, you raised that the NHS Pathways system does not differentiate between types of, severity of or the drugs / chemicals reported as being the cause of an overdose. The system also does not take into account the amount reported as ingested, the timing of ingestion or the patient's weight. In the case of sodium nitrite ingestion, treatment is only effective if medications are administered before the patient suffers a cardiac arrest. The Coroner's view is that the Pathways system does not reflect the time sensitive nature for an effective response.

The NHS Pathways Clinical Decision Support System (CDSS) is a triage product that is used to support call handlers (health advisors) in urgent and emergency care (UEC) services. The product is owned by the Secretary of State for Health and Social Care and is manufactured and managed by the Transformation Directorate of NHS England. It is used in NHS 111 and over half of 999 ambulance services.

NHS Pathways is an interlinked series of algorithms, or pathways, that link questions and care advice to lead 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 presenting symptoms. A disposition will specify the skill set and time frame that a patient requires and, where required, appropriate care/worsening advice is provided.

NHS Pathways is built around a clinical hierarchy, meaning that life-threatening symptoms are assessed at the start of the call to trigger ambulance responses, progressing through to less urgent symptoms which require a less urgent response (or

disposition) in other settings. NHS Pathways is not diagnostic, but instead works on the basis of 'ruling out'.

Clinical Governance of the NHS Pathways Product

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 (NCAG), an independent intercollegiate group hosted by the Academy of Medical Royal Colleges (AoMRC). This group is made up of representatives from Medical Royal Colleges and other clinical professional bodies and groups. Senior clinicians from these organisations 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 in accordance with agreed processes endorsed by NCAG.

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.

Overview of the Management of Overdoses and Suicidal Callers

Ambulance Emergency Operation Centres (EOCs) use one of two approved triage tools to take 999 emergency calls – AMPDS or NHS Pathways. The outcome (disposition) reached at the conclusion of the initial assessment must be mapped to approved, contracted standards. There is a requirement to map these outcomes to the various categories (Categories 1 – 5) set out within the NHS Constitution and Ambulance Service 999 contracts. Category 5 (originally Category 4H) relates to calls that do not require an ambulance response; there is no standard for Category 5 calls.

The grading of 999 calls are clinically based decisions and any changes are considered by the NHS England Emergency Call Prioritisation Advisory Group (ECPAG), based on receipt of a review of the evidence base with formal recommendations from the NHS England Clinical Coding Review Group (CCRG), with endorsement of the clinical rationale of proposed changes by the National Ambulance Service Medical Directors group (NASMeD). Any recommendations that are made and implemented will be formally reviewed with ongoing monitoring from ECPAG.

Overdoses, whether intentional or accidental, can be challenging cases to assess remotely; many different substances, medicines, doses and combinations are possible. This poses challenges to classify and appraise the relative lethality of the substances involved and balance this risk against the symptoms and circumstances at the time of the call. Where an overdose has occurred, and in the absence of signs or symptoms indicating an immediate life-threat (reduced consciousness level, breathlessness or shock, for example), the lowest disposition that can be reached is a Category 3 ambulance response. A higher response will be reached where there are symptoms indicating an immediate threat to life.

Ambulance EOCs follow specific principles on their respective triage tool to ensure clinical oversight for patients calling and presenting with overdose and suicidal ideations. These principles have been reviewed and strengthened through several national recommendations since 2019.

Firstly, on 2 April 2019, Professor [REDACTED] – the then National Clinical Director for Urgent and Emergency Care at NHS England – wrote to ambulance trusts and NHS 111 providers to mandate that robust clinical oversight was in place in control rooms and call centres to monitor self-harm and suicidal patients safely and effectively.

Secondly, in 2020, the then Healthcare Safety Investigation Branch (HSIB), investigated the potentially under-recognised risk of harm from the use of propranolol. They made a safety recommendation for NHS England to evaluate current approaches to clinical oversight of overdose calls within ambulance control rooms, and to develop a national framework to describe requirements for appropriate clinical oversight of overdose calls.

In April 2021, NHS England in conjunction with the Association of Ambulance Chief Executives (AACE) published a new operational procedure for all ambulance services in England entitled, “Category 3/ 999 Overdose and Suicidal Ideation Calls; Initial Assessment of Lethality/Toxicity Principles Document”). This document followed a detailed review that had been undertaken to consider agreed ambulance control room processes, to ensure suicidal patients receive the correct clinical response. This review had also been the catalyst for NHS England contacting all ambulance and NHS 111 services in early 2019 as described above. The guidance highlights the critical importance of clinical oversight and review (rather than, for example, a re-categorisation of calls to Category 1 on a case-by-case basis) and sets out that:

- where an overdose is declared, further clinical intervention should take place within 30 minutes, or the case must be automatically upgraded if this does not occur within 40 minutes.
- it is good practice for TOXBASE® (clinical toxicology database of the UK National Poisons Information Service) to be viewed for each overdose / accidental ingestion incident, despite the familiarity of the reviewing clinician with that particular toxicity profile, which includes sodium nitrite. It is noted that management practices often change in relation to specific toxins, therefore guidance around the use of TOXBASE® was issued instead. Utilising TOXBASE® similarly ensures that the relevant current guidance is accessed when managing emerging and novel substance ingestion enabling the clinician to assess risk on an individual case basis.
- the initial clinical review should also consider any ongoing suicidal ideation with a specific plan / means.

Most recently, the overdose guidance was updated in November 2023 to include callers who reach a Category 5 disposition (hear and treat). This followed a review by ECPAG, NHS England and NASMeD, part of the AACE, to ensure it remained clinically fit for purpose. For those cases which do not automatically result in a Category 1 or 2 emergency ambulance response, an urgent remote clinical assessment will take place, pending which the case will be dealt with as a Category 3 emergency ambulance response. The objective of further remote clinical assessment

is to determine the likely threat to the patient by gathering the clinical information about the substance(s) ingested and their quantities. Following this assessment, if the clinical view is that the case should be upgraded to a Category 1 or 2 emergency ambulance response, then this is done without delay.

In early 2019, NHS England also instructed ambulance and NHS 111 providers that any suicide-related cases reaching a Category 3 ambulance outcome should receive urgent clinical review. This would enable a clinician to consider the individual circumstances of each case, with a view to determining whether the case should be clinically upgraded to a Category 1 or 2 emergency ambulance response.

In response to this request, and in order to assist organisations in easily identifying the cases that needed an urgent clinical review, NHS Pathways introduced a new disposition code 'Dx0124 Emergency Ambulance Response for Risk of Suicide (Category 3)'. This disposition code raises the visibility of such cases, enabling such urgent clinical review. This review by clinicians could involve re-triage to higher levels of response if required. It has also facilitated clearer visibility of such cases within the ambulance dispatch queue. This is in addition to information which was already fed into the dispatch system by NHS Pathways by way of 'symptom discriminator codes'. NHS Pathways has a code identifying suicidal means and a plan (SD4244- AMB suicidal means and a plan). The disposition code was deployed to all service users as part of Release 18 in October 2019.

Should national guidance or standards be amended such that toxic substances, where identified, impact on ambulance categorisation or disposition, NHS England would align the NHS Pathways system accordingly.

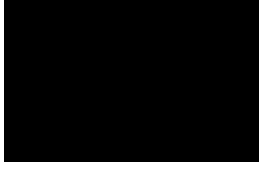
Your second concern relates to the fact that it is not national protocol for ambulance services to carry antidote medication (Methylene Blue) for on-scene administration. You have raised that patients who have ingested sodium nitrite often enter cardiac arrest before arriving at an acute hospital within an Emergency Department.

The carrying of particular medication by ambulance services is an operational issue and is up to individual ambulance trusts; NHS England does not mandate such issues. NHS England is aware of a small number of ambulance specialist units who carry Methylene Blue. This antidote is carried by specialist clinical teams for administration in cases of moderate/severe sodium nitrite poisoning which can be measured through an exhaled breath monitor. Clinical feedback suggests it is likely Methylene Blue would not be used except for severe cases or where there is a long journey time to definitive care.

I would also like to provide further assurances on the national NHS England work taking place around the Reports to Prevent Future Deaths. All reports received are discussed by the Regulation 28 Working Group, comprising Regional Medical Directors, and other clinical and quality colleagues from across the regions. This ensures that key learnings and insights around events, such as the sad death of Joel, are shared across the NHS at both a national and regional level and helps us to pay close attention to any emerging trends that may require further review and action.

Thank you for bringing these important patient safety issues to my attention and please do not hesitate to contact me should you need any further information.

Yours sincerely,



National Medical Director