



## **Background on NHS Pathways**

NHS Pathways is overseen by the National Clinical Assurance Group (NCAG), an independent intercollegiate body hosted by the Academy of Medical Royal Colleges. It underpins all NHS 111 services and more than half of England's 999 telephony services. The tool also supports online triage and in-person and enhanced clinical assessments via modules such as the NHS Pathways Clinical Consultation Support (PaCCS) system. The safety of NHS Pathways triage outcomes (known as dispositions) is overseen by the NCAG. Alongside this external scrutiny, NHS Pathways aligns its content with up-to-date national clinical guidance, including guidance from the National Institute for Health and Care Excellence (NICE), Resuscitation Council UK and UK Sepsis Trust.

NHS Pathways follows a structured clinical hierarchy. Serious and potentially life-threatening symptoms are assessed first to ensure rapid escalation, such as dispatching an ambulance or involving a clinician. The assessment then progresses to less urgent symptoms to identify the most appropriate level of care. The tool is not diagnostic. Instead, it works by systematically ruling out more serious causes of symptoms to ensure safe, efficient triage. Relevant history is gathered where clinically necessary to minimise triage time while maintaining safety. In telephone settings, assessments are conducted by specially trained non-clinical health advisors. These advisors complete a rigorous training programme and are supported at all times by clinicians. If a case is complex or unclear, health advisors are required to escalate to clinical colleagues. It is therefore a condition of the NHS Pathways license that clinical supervision and escalation support must be available 24/7.

The NHS Pathways system supports over 2.5 million triage assessments each month across telephone, digital, and face-to-face settings.

## **Principles of Health Advisor Training**

In telephone settings (calls made to NHS 111 or 999), assessments are conducted by specially trained non-clinical health advisors. These advisors complete a comprehensive, structured training programme to ensure they can use the NHS Pathways algorithm safely and effectively. They are always supported by clinicians, as a condition of the NHS Pathways licence, which NHS 111 and 999 providers must enter into in order to use the system. If a case is complex or unclear, health advisors are required to escalate to clinical colleagues. As above, the NHS Pathways licence states that clinical supervision and escalation support must be available 24/7, and immediately accessible to health advisors during live calls. This clinical availability is a core system control.

Following initial core role training, both health advisors and clinicians are required to undertake mandatory training aligned to each new release of the NHS Pathways system, which typically occurs every 12 weeks. This ensures that staff remain up to date with any changes to clinical content, pathways, and system functionality. In addition, they have access to a comprehensive suite of ongoing learning resources, including 'Hot Topics', case studies and e-learning packages, which support continuous professional development and dissemination of learning.

Alongside this, providers are required to undertake regular quality assurance processes, including monthly audit of calls. These audits assess a range of core competencies, including the effective use of probing, and provide structured feedback to support ongoing development and safe practice.

Within NHS Pathways, health advisors are trained and expected to actively probe to clarify and refine the information provided by the caller. This is a fundamental component of the NHS Pathways model and forms an important part of its safety design.

### **NHS Pathways Assessment of Bleeding**

In respect of the NHS Pathways system, we can confirm the following occurs within the triage for all age groups:

- Immediate establishment of whether there is, or has been, any bleeding present, even if it has stopped at the time of the call;
- Whether the bleeding has been “*heavy*” within the last 2 hours. This establishes if there is serious, or life-threatening bleeding. The supporting information states that this may be described as “*spurting, spraying, gushing or pouring, or may have made a puddle or soaked through a towel.*” The system describes that this may equate to a loss of a mugful of blood in adults through to an egg cupful for younger age groups;
- The triage system then seeks information about the approximate amount of blood lost: for adults “*2 mugfuls or more*” progresses to asking about “*bleeding from a wound or break in the skin*” and whether the “*blood is spraying or spurting out.*” Answering ‘Yes’ to this, as from the information provided may have been the case in this incident, would result in a **Category 2 ambulance disposition for Major Blood Loss**. From the information submitted by YAS this confirmed that this is the **same categorisation** as this case was coded in the other triage system;
- The NHS Pathways system further prompts call takers to ask if the wound is covered by a dressing. If the answer to this is “Yes” the system seeks to establish if “*...there is blood dripping or soaking through (the dressing)...*” This further assists in establishing where bleeding is not controlled.
- In other cases where an ambulance disposition has not been reached, the system prompts questions to ascertain what the bleeding is like at the time of the call. I.e. is it “*getting worse*”, “*about the same*”, “*slowing down but still bleeding*”, or whether the bleeding has stopped.

To summarise, a comprehensive assessment of bleeding occurs in NHS Pathways triage. This is at the beginning of the assessment, where immediate threats to life are ruled out. This assessment has been developed with oversight from the National Clinical Governance Assurance Group for NHS Pathways, who have reviewed and signed off the system relating to this type of clinical scenarios, cases and prior incidents.

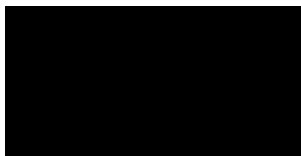
From the information provided regarding Dr Cully, I would wish to convey to you that the serious nature of such bleeding would have been dealt at least as well as in the other system. And whilst the exact wording between the two systems differs. NHS Pathways does identify volumes of blood lost, nature of bleeding and picks up signs of catastrophic bleeding such as pooling or soaking through dressings, rather than asking a clinical judgement to be made by the caller as to whether bleeding is uncontrollable or dangerous. When uncontrolled bleeding is identified, as is most likely in a case presenting with the same or similar symptoms, the recommended disposition in line with up-to-date national clinical guidance is for a Category 2 ambulance for Major Blood Loss. This is the same ambulance response outcome as in this case, although tragically due to high demand, an ambulance was not available to attend Dr Cully for 1 hour and 20 minutes.

NHS England is in close contact with providers using the NHS Pathways system and will liaise with Yorkshire Ambulance Service to confirm/discuss any learnings from this case.

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 Dr Cully, 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  
NHS England