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Dr Karen Henderson HM Assistant Coroner for West Sussex Centenary House Durrington Lane Worthing BN13 2PQ

7th December 2021

Dear Dr Henderson

NHS Digital Response to Regulation 28 Report – inquest touching the death of Hannah Royle

I am writing in response to the Regulation 28 Prevention of Future Deaths ("PFD") report received from HM Assistant Coroner dated 4th October 2021. This follows the death of Hannah Royle who sadly passed away on 1st July 2020. This was followed by an investigation and inquest which concluded on 29th July 2021. I am Dr

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.

I would like to reiterate my sincerest condolences to

I have had the opportunity to discuss the Regulation 28 report with representatives from NHS England, South East Coast Ambulance Service (SECAmb) and Health Education England to ensure that all aspects are responded to by the relevant party.

In response to the matters of concern outlined in the report:

1. Both calls to the 111 service were significantly non-compliant; the call handlers did not

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correctly complete the algorithm, they did not take into consideration Hannah's disabilities and inability to verbalise, they failed to recognise Hannah as a complex case requiring transfer to a more senior member of the 111 service despite Hannah's parents providing sufficient information for that to be the case

SECAmb have agreed to respond to this matter.

2. The 111 service does not have a sufficiently robust system to manage members of the public with underlying disabilities in that no accommodation is given for it in the completion of the algorithm

As set out in my witness statement to HM Assistant Coroner dated 22 July 2021, NHS Pathways is a comprehensive decision support system, which assesses symptoms presented at the time of a call and signposts to next level of care. Therefore medical history (including disabilities) is not routinely enquired about as it could delay assessment of life-threatening symptoms, and it would not be clinically safe for non-clinical Health Advisors to assess the impact of a patient's medical history. It would also not be safe or appropriate to apply blanket rules based on the presence of learning disabilities. However, where a certain medical history is relevant to a specific clinical problem, then NHS Pathways will present relevant questions to be asked. For example, within the chest pain pathway, the caller is asked if they have ever been diagnosed with a heart condition.

There are functions within NHS Pathways that have been designed to support those who have learning or developmental needs, and to support Health Advisors to respond to declarations of medical history, principally through the complex calls and early exit functionality as detailed below.

A key element of healthcare delivery is recognising when one is at the limit of one's knowledge or understanding and escalating the matter appropriately. An important safety feature within NHS Pathways is the identification of a 'complex call'. A complex call is defined as 'any call which isn't straightforward and where the Health Advisor determines that they are working at or beyond the limits of their knowledge'. In addition to this broad definition of a 'complex call', the following situations would also be classed as 'complex':

- a. Difficulty in obtaining adequate information;
- b. The caller being unable to prioritise a main symptom;
- c. Declared past medical history; and
- d. A call that relates to medication or a medical procedure

Health Advisors are taught, as part of their core training by providers, about the definition of complex calls, the rationale for why these should be managed by a clinician, and how to transfer these using the system. They also spend time practising this through role play scenarios using the system. NHS Pathways has developed training materials and led sessions to support providers to manage complex calls.

The NHS Pathways system provides a route for Health Advisors to take in the event of a complex call, and if they are unable to get sufficient information to complete a safe and thorough triage. This is called 'Early Exit'. Early Exit results in a transfer to a clinician. The importance of utilising Early Exit is covered during NHS Pathways Core Training and embodied within the competencies that staff are audited against.

Probing is also a vital skill throughout calls, which Health Advisors are trained on. It is often needed

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at the outset to establish the reason for the call, or the presence of any life-threatening problems. It is needed during the symptom assessment and it may be needed once a disposition has been conveyed, if there seems to be resistance to the outcome. It is also essential to realise when probing is not needed. This includes situations where ample information has been provided or situations where it is clear that even an endless amount of probing would not get a clear answer to a question. In these situations, Health Advisors must consider the safest alternative which, depending on the situation, may be to transfer to a clinician via the Early Exit function.

At the time of Miss Royle's inquest The NHS Pathways Training Team were in the process of developing additional learning content for all users of the system. This has subsequently been released and the content of this new material focuses on:

a) The difference between a learning disability and a learning difficulty

b) The causes of learning disabilities

c) The health inequalities and healthcare access difficulties experienced by some people with a learning disability

d) Strategies to aid communication over the phone with a person with a learning disability.

This learning material was released on 7th September 2021 and is included in updated core mandatory training for new Health Advisors and Clinicians within NHS111 and 999. Similar material has also been developed and released for all existing staff, which will be delivered by providers.

3. The skill and expertise of the 'clinical advisor' was wholly inadequate for her position as she had no contemporaneous or relevant experience in working in an emergency department as a nurse. She was also insufficiently robust in her assessment and understanding of Hannah's condition when the call handler contacted her for advice.

Safe and appropriate use of NHS Pathways by NHS care providers is governed by way of a 'Licence to Use'. The 'Licence to Use' is managed by NHS Digital and all providers using NHS Pathways must enter into and comply with it. It defines the type of Clinician that can potentially receive training to use NHS Pathways in a clinical capacity as follows:

"Clinician" means either:

- (a) a registered nurse; or
- (b) a registered paramedic; or

(c) any other personnel with an appropriate recognised clinical qualification as authorised and notified to End Users by the Authority from time to time, and which is selected by the End User to receive the necessary training to enable them to perform the role detailed in schedules 1 and 2;

The criteria for employment is managed by the provider (in this case SECAmb) to ensure that the Clinicians employed have the appropriate qualifications, skills and experience. The provider is also responsible for the ongoing audit and performance management of Clinicians, which is also mandated through the Licence to Use. To this end the Licence to Use states:

The End User is responsible for ensuring on an ongoing basis that each Clinician is at all times able to demonstrate the underpinning education, skill, experience and professional scope of practice to enable them to:

• undertake autonomous holistic physical health and mental health assessments, which includes differential diagnosis;

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- direct an appropriate clinical management plan; and
- refer or discharge patients with unscheduled and emergency health and social care needs.
- 4. Members of the public who contact the 111 are ill-informed with a real risk they are being misled over the role and capability of the 111 service. There is little clarity or understanding by the public that it is based on following and completing an algorithm by individuals who have no need for any qualification in health care and who will only receive a short training programme after they are employed. Hannah's parents indicated that if they knew this, they would have opted to ring 999 and the outcome would have been different.

NHS England have agreed to respond to this matter.

5. The 111 service is not a 'diagnostic' service yet the 'call handlers' have been renamed 'health advisors'. This is misleading to the public as it implies Regulation 28 – After Inquest Document Template Updated 30/07/2021 professionalism which is untrue given their underlying skills and unsubstantiated given it is their role to complete an algorithm.

NHS England have agreed to respond to this matter.

6. The NHS pathway for 'Abdominal Pain' is insufficiently robust or sufficiently discriminatory to effectively deal with the myriad of potential symptoms associated with this complaint.

NHS Digital has a well-established procedure, the "clinical enquiries log", for providers to submit issues and for these to be reviewed and responded to by NHS Pathways. The investigation carried out by NHS Pathways, following the enquiry by SECAmb, concluded that for such a non-verbal patient with learning needs, both of the calls from Hannah's parents should have been considered as "complex calls" (as per Health Advisor training) and transferred to a Clinician for assessment, rather than following the pathway for abdominal pain.

NHS Pathways subsequently undertook a review of the abdominal pain pathway with particular reference to abdominal emergencies, including intestinal obstruction as experienced by Hannah. The questions within NHS Pathways, which relate to symptoms of potential obstruction include:

- Questions relation to features of life-threatening illness, which include questions about respiratory distress or shock.
- A question about the presence of abdominal pain in the diarrhoea and vomiting pathways.
- Critical illness questions including functional impairment (unable to carry out usual activities), being confused or being breathless.
- Questions on severity of pain either keeping still because of the pain or writhing/ rolling around because of pain.
- A question about feculent vomiting.

The review, which concluded in July 2021, was carried out in conjunction with the Royal College of Surgeons (Scotland) and Royal College of Emergency Medicine and concluded that the current

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questioning within NHS Pathways was robust in triaging symptoms that could relate to obstruction of the bowel.

In addition, NHS Pathways invited comment regarding this particular case and the associated presentation of symptoms from Royal College of Surgeons (Scotland) and Royal College of Emergency Medicine, who recommended no further changes were required to the abdominal pain pathway.

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 Governance Group (NCGG) and Coroner referrals are submitted to NCGG as a standing agenda item.

NHS Digital takes its role in such inquiries and any PFD report received very seriously. NHS Digital wish to reassure the Coroner that it fully investigates and responds to PFD Reports accordingly. If I can be of any further assistance, please let me know.

Yours sincerely

Dr Chief Clinical Officer, NHS Pathways NHS Digital



Appendix A

BACKGROUND INFORMATION

Function of NHS Pathways

NHS Pathways is a programme providing the Clinical Decision Support System (CDSS) used in NHS 111 and half of English ambulance services. This triage system supports the remote assessment of over 18 million calls per annum. These calls are managed by non-clinical specially trained call handlers who refer the patient into suitable services based on the patient's health needs at the time of the call. These call handlers are supported by clinicians who are able to 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 problems assessed at the start of the call trigger ambulance responses, progressing through to less urgent problems which require a less urgent response (or "disposition") in other settings.

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 Governance 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. Changes to the NHS Pathways clinical content cannot be made unless there is a majority agreement at NGCC.

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

- NICE (National Institute for Health and Clinical Excellence)
- The UK Resuscitation Council
- The UK Sepsis Trust