North East
Ambulance Service
NHS Foundation Trust

Strictly Private and Confidential
Ms Claire Bailey
Senior Coroner
His Majesty's Coroner for Teesside
The Coroner's Service
Middlesbrough Town Hall
Albert Road
Middlesbrough
TS1 2QJ

Ambulance Headquarters
Bernicia House
The Waterfront
Goldcrest Way
Newburn Riverside
Newcastle upon Tyne
NE15 8NY

[redacted]

Date: 11 March 2024

Dear Ms Bailey,

Inquest into the death of Donna Georgina Smith

Regulation 28 – Report to prevent future deaths

I am writing in my role as Chief Executive of North East Ambulance Service NHS Foundation Trust ("NEAS") and in response to the Regulation 28 Reports for the prevention of future deaths as issued by you following the inquest into the tragic death of Donna Georgina Smith. I am aware that you issued 2 separate Regulation 28 Reports, dated 18 January 2024 and 22 January 2024, to NEAS and the Rt Hon Victoria Atkins MP the Secretary of State for Health and Social Care.

I have opted to write one response to cover the concerns listed in the reports as I believe they are interlinked and avoids any duplication in response.

The matters of concern listed in your report are: -

Report 1 dated 18 January 2024

1. The computer programme and algorithms do not detect a worsening condition and do not prompt or indicate re-classification of a call from Category 2 to Category 1.

Report 2 dated 22 January 2024

1. The call handler did not detect a worsening condition and did not escalate the call from a Category 2 to a Category 1.

2. The methods of detecting worsening conditions in existing Category 2 calls are not sufficiently robust (dispatch clinician and numerous call condition).

3. The Category 2 call target (18-minute average response and 95th percentile a 40-minute response) was breached and the ambulance arrived 1 hour and 6 minutes after the first call.

We will address each point you have raised in your matters of concern below: -

Report 1 dated 18 January 2024.

1. **The computer programme and algorithms do not detect a worsening condition and do not prompt or indicate re-classification of a call from Category 2 to Category 1.**

   The computer programme and algorithm used by NEAS, and other ambulance services across the country, is the NHS Pathways telephone triage system which is a clinical decision support system (CDSS) supporting the remote assessment of callers to urgent and emergency services. The NHS Pathways system is widely used in the following settings:

   - NHS 111 (ambulance services including NEAS)
   - 999 (ambulance services, including NEAS)
   - Integrated Urgent Care Clinical Assessment Services
   - NHS 111 Online
   - To assist in the management of patients presenting to urgent care or emergency departments

   The system is owned by the Department for Health and Social Care and delivered by the Transformation Directorate of NHS England. NEAS, as a service commissioned by NHS England and host system suppliers enter into licences with the Secretary of State for Health and Social Care, allowing them to embed NHS Pathways within their products. The system is maintained by a group of experienced staff most with an urgent and emergency care background. All the clinical authoring team are registered, licensed practitioners.

   To this extent NEAS have limited ability to fully respond to this specific concern and will defer to the response via the Secretary of State for Health and Social Care. We will of course fully liaise with our colleagues in NHS England to provide any additional information that will aid their understanding of the concerns as a result of the inquest. NEAS are members of a national NHS Pathways User Group and feed concerns into an issues log which is used to consider learning and system development/improvement.

Report 2 dated 22 January 2024.

1. **The call handler did not detect a worsening condition and did not escalate the call from a Category 2 to a Category 1.**

   In respect to this concern, the NEAS investigation concluded that the call handler managed the call correctly and followed the NHS Pathways system and generated a Category 2 ambulance response. This is the highest level of response for a patient who is severely unwell but conscious and breathing and in line with the Ambulance Response Programme (ARP).

   There are four categories of ambulance response, with the timeframe for arrival set nationally as part of the Ambulance Response Programme (ARP):

   - Category 1 responses aim to arrive within 7 minutes, but on 90% of occasions no later than 15 minutes. This is the highest level of emergency response and is appropriate for patients with immediately life-threatening presentations (for example, patients who are unconscious or not breathing).

   - Category 2 responses aim to arrive within 18 minutes, or on 90% of occasions no longer than 40 minutes. This category is for serious conditions requiring rapid

assessment and/or urgent transport (for example, chest pain/suspected heart attack, or stroke symptoms with an onset within the previous 4 hours).

- Category 3 responses are a two-hour target and are appropriate for urgent conditions which are not immediately life-threatening (for example non-life-threatening injury from a fall).

- Category 4 responses are non-blue light response and are the lowest priority. Most of these calls will be dealt with through hear and treat or see and treat. The National Standard is for 90% of patients to have received a response within 3 hours.

During periods where there is more demand for ambulances than we have ambulances available to attend, we will prioritise the responses according to the categories above and will divert travelling vehicles to patients of a higher clinical priority who require more urgent assessment or life-saving interventions.

Call handlers do not have the ability to choose the system generated response as this is achieved via the system algorithms. Whilst a clinician can upgrade an ambulance response based on a clinical assessment, in this case the fact the patient was still breathing, and conscious would not have generated a Category 1 response. I understand this was covered in evidence heard during the inquest and the findings within the NEAS investigation. We will defer further commentary on this point as it will be considered in the response by the system owners, NHS England via the Secretary of State for Health and Social Care.

2. The methods of detecting worsening conditions in existing Category 2 calls are not sufficiently robust (dispatch clinician and numerous call condition).

Clinicians working in the Emergency Operations Centre (EOC) have the ability to upgrade a disposition following their clinical assessment, supported by the NHS Pathways system and underpinned by their clinical knowledge. In this case the investigation identified that the clinician had not sufficiently probed the responses provided.

The clinician's call review highlighted that the call was below the required standard due to insufficient probing of the patient's symptoms within the following areas:

1) The clinician did not ask if the patient was conscious.
2) The clinician did not ask for the skin temperature to be rechecked.
3) There was no probing regarding the level of breathing when described as shallow.
4) There was no probing regarding past medical history.
5) The clinician asked no questions about the chest pain.
6) It is unsafe to ask a patient having a possible MI to be taken to hospital by car.
7) There was no probing into why the family could not get the patient out of the chair.
8) The clinician did not ask why the fire brigade were attending.
9) Attitudinal concerns

In the event that information was available pertaining to the above concerns, this would have aided clarification of a peri arrest patient. However, had the patient been conscious, still warm to touch and with regular breathing the resultant disposition would not have reached a higher priority (Category 1). Incidentally, information available on the ePCR outlined that the patient was alert and orientated upon arrival therefore the Category 2 disposition, at the time of ambulance arrival, was appropriate.

Whilst not directly linked with this case, we are writing a procedure for EOC clinicians to provide guidance for deteriorating patients. The procedure is not yet finalised given the complexities and balance of not overwhelming the system with higher priority ambulance responses. The risk with the latter is that we would create potential risk for patients categorised as Category 2 and Category 3, ultimately leading to delayed responses. The underpinning principles are those achieved by using the NHS Pathways system and/or other algorithm-based triage tools and achieving the Ambulance Response Programme response targets.

3. **The Category 2 call target (18-minute average response and 95th percentile a 40-minute response) was breached and the ambulance arrived 1 hour and 6 minutes after the first call.**

I am aware that the inquest touched upon the pressures faced by the health and social care system and therefore the inclusion of the Secretary of State for Health and Social Care in the Regulation 28 Report. The following details provide an overview of the work being undertaken by NEAS and the action plans we are working towards. This includes contracting negotiations to secure additional funding to help improve service delivery and ambulance response times.

The Trust has developed and are working within a detailed action plan to improve our Category 2 ambulance response, which links with our other Ambulance Response Programme (ARP) targets. The action plan is split into three main categories, 'Increase Response Capacity', 'Decrease Response Demand' and 'Improved Operational Efficiency'.

To provide some current context, the following information provides an overview of our performance in December 2023. We have extracted this information from a performance exception report which was shared with the Trust's Performance and Finance Committee on 23 January 2023.

- Performance for December 2023, while challenged shows significant improvement against December 2022, despite significant increases in call demand, Emergency Operations Centre (EOC) clinician demand and face to face incident demand.
- Response times for C1 and C4 have remained stable with increases noted for C2 and C3, as expected. Only C1 90th Percentile achieved the national standard in December 2023. Increased demand and deteriorating handover performance have been the main contributing factor to increased response times in December 2023.
- Benchmarking data shows that NEAS is performing well compared to the rest of the sector. NEAS is the best performing Trust for both C1 targets and C4, with all other categories better than the national average. For the year-to-date NEAS is reporting Category 2 mean position at 35m 23s, which is better than the YTD national average of 36m 15s.
- Both 111 and 999 mean call answer continues to perform well with both reporting special cause improvement, despite increases in call demand (999 +12%; 111 +19% compared to previous month). 999 call answer achieved the national standard for a fourth consecutive month.

- EOC clinician demand significantly increased in December 2023 compared to the previous month (+22%), impacted by increases in 111 call demand. Despite the increase in demand 111 C3/4 validation rate has continued to improve and call back performance and ED validations have remained within normal limits. Performance against clinical KPI targets remains challenging.
- Patient Transport Service (PTS) performance continues to flag as special cause concern, with only time on vehicle <60 minutes consistently achieving the standard. The volume of completed and aborted journeys remains high with fluctuations in daily demand along with impact of industrial action impacting operations.
- C2 mean for December 2023 was 2 minutes 6 seconds better than planned at 42 minutes 29 seconds. Capacity hours (+3.1%), average handover times and unavailable time performed better than planned, despite increased demand (+4.0%) and on job time.

The report progresses to provide updates against the Category 2 improvement action plan, in relation to the actions to reduce demand, the following updates were provided:

- Rotational [between duties on the road and duties in EOC] paramedics recruited into EOC to support C2 Segmentation [further clinical validation of C2 cases to identify cases that are not C2. This protects resources for C2 patients whilst still caring for none C2 patients] and 999 C3/4 validation are operational. C2 Segmentation is now live, with early data indicating this is having a positive impact on validation outcomes.
- New Health Care Professional (HCP) process went live on 11 September 2023 to support identification of appropriate response categories. Early data shows that we have seen a significant increase in Level 3 HCP requests, while overall HCP demand has not shown signs of reducing. Work is being planned in the wider system to further consider actions which could be taken to address HCP demand.

The actions to increase capacity update included:

- Continued delivery of Paramedic and Clinical Care Assistant (CCA) recruitment plans, remain on track.
- All additional third-party hours funded by additional NHS England investment have now been secured.
- Additional shifts are being offered as overtime to boost capacity, with targeted overtime shifts incentivised over the Christmas period.
- Options to extend operating hours within NEASUS and support improved vehicle availability are being reviewed. Bi-weekly operational fleet meeting is now in place to provide clearer oversight and scrutiny to vehicle shortages to enable us to work better with NEASUS and be more proactive in identifying hot spots. (NEASUS is a wholly owned subsidiary of NEAS, providing fleet and other specialist services)
- Full review of all Alternative Working Duties completed.
- Buy-back scheme for annual leave has been implemented.
- Cleveland Fire Service are now responding to Category 1 incidents in the Loftus area.

Action to improve efficiency update included:

- Task and Finish group established to focus on releasing time including improvement of processes to manage downtime, system development being progressed to enable auto clear for crews. Individual level reports have been developed to support performance management of downtime. Changes to downtime codes and processes have been developed.
- A new deployment plan for Advance Practitioners (APs) has been developed and trialled, which aims to increase utilisation as well as reducing conveyance rates by targeted deployment.
- Action plan in place to reduce On Scene time for See and Treat incidents.
- Operations Co-ordination Centre (OCC) is now in place providing a centralised function based on the best practice and learning from other ambulance Trusts. A central point which will manage any time critical matters to ensure consistency and clarity to both internal and external stakeholders.
- The Trust continues to work with the ICB to support the wider system delivery of handover improvement. Additional system actions have been implemented to mitigate impact of handover times including: 2-hour handover reporting to Directors on-call, with 3-hour handovers escalated to ICB strategic on-call; Paramedic and Nurse Emergency Department navigators in place in 4 locations; Hospital Ambulance Liaison Officers (HALO) in place at James Cook. Development of immediate handover proposal is being progressed as part of C2 extremis actions.

The report concludes with an overview of the C2 performance forecast:

- C2 forecast of 00:34:57 for 2023/24 has been submitted to NHS England following approval by Executive Management Group (EMG). This is an increase from the position submitted the previous month which reflects increase in forecast demand in Q4 2023/24 of 0.7%, a reduction in weekly vehicle hours of 0.7% impacted by increased CCA attrition rates and updated maximum third party hours.
- There remains considerable risk in the forecast with January expected to be more challenging linked to flu peak expected to be seen mid-January and the level of unknown risk associated with strike action. Ambulance handover times and demand also remain key risk factors:

    - Ambulance Handover times: average handover time is forecast to achieve 21minutes for the year, which includes deterioration through winter in line with the plan. Current handover times are above forecast, with the risk that these will continue to deteriorate. The Trust continues to work with the ICB to support the wider system delivery.
    - Levels of demand: The actions NEAS have taken internally, including deploying additional capacity, use of third-party providers, and category 2 segmentation have given a benefit in meeting increasing demand, and maintaining rather than improving performance.

If it would be helpful, we can share a copy of the performance report for your information, this provides a greater level of detail in respect to the ongoing efforts the Trust is making to improve performance. The detailed report contains supporting data analysis which contains commercial sensitive information, but we would be happy to share this for your information.

As mentioned, NEAS have a detailed Category 2 improvement action plan, the following detail is taken from this action plan, which we have summarised, to provide an overview of the actions implemented to date alongside the additional actions NEAS have identified and are progressing at pace. The first section relates to those actions NEAS have completed before progressing onto those being implemented and assessed for impact.

1. **Dedicated dispatch officer focused on pass to Patient Transport Service calls.**

   Following a Trial and identification of a clinical visibility issue with Pass to Patient Transport Service (PTS) approach a solution of an additional specific dispatcher was suggested and trialled. This has seen positive results and will be implemented for the remaining financial year. This will support additional pass to PTS and reduction of activity on Urgent and Emergency crews by using non-emergency ambulance for transportation where appropriate.

2. **Designate a volume of Pass to Patient Transport Service (PTS) work per day and allocate Third Party Providers (TPP) vehicles to do this.**

   Linked with point 1 above, with pass to pass to Patient Transport Service (PTS) this will be co-ordinated through the additional Dispatch desk to co-ordinate PTS resources supporting Urgent and Emergency crews. As above, a dedicated dispatcher has been allocated to dispatch Third Party Provider resources.

3. **Review Dispatch Plan on multiple resource assignments.**

   We have analysed data regarding current responses per incident against national benchmarking data. Alongside a review of the deployment guidance, the analysis shows we are placed in the middle for responses per incident against national benchmarking.

4. **Secure additional Patient Transport Service (PTS) support focused on weekends.**

   The Patient Transport Service (PTS) management team have improved the opportunities for PTS staff and resources to respond to urgent and low acuity pass to PTS demand at weekends in addition to supporting 7-day discharge efforts at weekends.

5. **Incentivise weekend overtime.**

   Following several reviews, the use of incentivised payments over specific periods had very limited effect on achieving higher levels of staffing at key points. An updated report was received and considered by the Executive Management Group (EMG), outlining recommendations to offer enhanced overtime on certain shifts of the week for a defined period. This action was closed on 4 January 2024.

6. **All Health Care Professional (HCP) calls to be a clinician-to-clinician conversation.**

   The reliance of HCPs upon NEAS has been flagged to the ICB and features as one of their actions regarding demand reduction. Despite NEAS' success triaging HCP calls to the correct category, there has been minimal movement of the overall volume of HCP requests to NEAS. There is an option for all HCP referrals to be clinically assessed on booking. This had benefits during industrial action, however it is not popular with HCP callers and potentially an action in escalation. NEAS continues to be an outlier for HCP activity. Further work is planned with the ICB to establishing how overall demand could be safely reduced. This specific action was closed and combined with another action to review the whole HCP triage process.

7. Review End of Shift tasking.

The end of shift tasking policy was reviewed to identify opportunities for improved response to C2 calls at end of shift. The review concluded that the policy was clear in respect to tasking crews to cases. The action was closed on 11 January 2024.

8. Revisit NEASUS SLA and look for increases in productive vehicle hours.

It was agreed that a focus on vehicle availability and the ability to flex to increase the number of vehicles available for overtime and clinical supervision should be a priority. There is potential of supporting NEASUS with financial support to flex on current SLA. This action was closed in December 2023. NEASUS is North East Ambulance Service Unified solutions and is a wholly owned subsidiary company providing fleet management and other support services to NEAS.

9. Secure additional overtime

Current levels of overtime uptake is running at 5%. Experience suggests more than this is achievable so further work is required to test solutions to offer and secure greater levels of overtime uptake. A report was received and reviewed by the Executive Management Group (EMG) in December 2023 outlining a recommendation to offer enhanced overtime on certain shifts of the week for a defined period. This action was closed.

The next section provides an overview of the actions which are in progress and/or in the pipeline to commence. I have not expanded the details due to the significant detail included in the action plan. I have not shared a copy of the action plan at this stage but would be happy to forward a copy if it would be beneficial. As I have mentioned above, this type of information is commercially sensitive as it touches upon wider health and social care system work.

1. Split Dispatch Desks now that have the highest volume of resource/activity.
2. Stop any call upgrades without consultation with a senior clinician.
3. Implement Clinical Navigator Role
4. Offload at 45 minutes
5. Prioritise Revalidation over 111 calls waiting for clinician input
6. Review of HCP triage and process
7. Low level of No send implemented as ‘Business As Usual’ (BAU)
8. Localised Targets for Geographical Areas
9. Auto Allocation of Community First Responders (CFRs) and Falls Teams
10. Visibility of the Number of ‘Hear and Treat’ cases required per shift to meet the target
11. Evaluate on scene time to establish targets, assisting Emergency Operations Centre.
12. Reduce need for passing patient details back to GPs.

Ongoing work linked with the above includes the following improvements to help maintain resource availability for Category 2 emergency response. NEAS are currently employing the following additional tactics.

<u>eVDI/daily clean trial</u>

We are implementing a trial process in one division aimed at optimising the efficiency of ambulance operations by standardising essential tasks, completion time and enhancing communication between ambulance staff and dispatch. Currently, ambulance crews are required to conduct vehicle inspections, including a drugs and equipment check, as well as sterilise their vehicles (known as the daily clean) at least once every 24 hours.

However, the time it takes to complete these tasks varies, leading to potential delays in responding to emergencies. To address this issue, we have conducted time and motion studies to establish a benchmark time of 20 minutes for completing these tasks. During this protected period, the system automatically times the staff, and dispatch staff receive automated alerts once the 20-minute period elapses. This streamlined process ensures that all essential tasks are completed effectively, setting clear expectations for staff and eliminating the need for interpretation. By providing ambulance crews with protected time and promptly alerting dispatch staff when they are available for dispatch, we aim to minimise delays, enhance communication, and improve overall operational efficiency.

Staggered shift start and finish times

In addition to optimising operational efficiency through the trial process outlined above, we are further enhancing capacity during break periods and end-of-shift protection periods by implementing staggered start and finish times for ambulance crews. This strategic adjustment ensures a smooth transition at shift changeovers and eliminates potential bottlenecks. By staggering start and finish times, we effectively stagger break windows as well, optimising resource utilisation throughout the day. Moreover, we are leveraging third-party providers to cover bridging shifts during break and shift changeover periods. These providers seamlessly fill in gaps in coverage, ensuring continuity of service and minimising any disruptions in emergency response. By engaging third-party providers strategically, we bolster our capacity during critical periods, maximising our ability to respond promptly to emergencies and maintain high standards of care for the community.

Dispatch Clinical Risk Assessment Standard Operating Procedure (SOP)

In December 2021, we implemented a Dispatch Clinical Risk Assessment Standard Operating Procedure (DCRA) aimed at dispatching ambulances to patients more effectively using a clinical risk approach. This process ensures consistency and optimises resource utilisation by prioritising based on clinical risk rather than just the order of time. Traditionally, ambulance services use priority codes (C1, C2, C3, C4) to dispatch ambulances, with C2 being the most common category encompassing a broad range of critical conditions. However, our new process further categorises C2 calls based on clinical risk rather than solely on the time the call was received. These secondary priority codes are derived from a variety of data sources, including mortality data, ED pre-alert data, patient outcome data, recontact data, input from the NEAS patient safety department, national policy, and coronial data. Emergency Operations Centre (EOC) clinicians and dispatchers collaboratively review each C2 call, clinically assess it for risk, and assign a secondary code. Dispatchers then utilise a deployment plan to prioritise responses accordingly.

For instance, if a clinician determines through patient assessment that an immediate response is necessary, they categorise the call as 'priority,' with only Category 1 calls taking precedence. In addition to the EOC clinician code, there is an operational code allowing lone paramedic responders to request immediate backup, known as ‘Red’ backup. This code supersedes C2 cases without a sub-code and P3 to P7 sub-codes. Priority levels P3 to P7 are assigned to Category 2 calls based on the severity of the condition using a predetermined set of criteria. This system ensures that the sickest patients receive attention promptly, reducing the need for estimated time of arrival (ETA) calls and upgrades. By prioritising obviously sick patients, dispatchers enable clinicians to focus on undifferentiated cases that may be suitable for alternative transport or safe to wait, thereby reducing clinical risk and alleviating service-wide pressure. This structured approach enhances patient care and resource allocation within the ambulance service.

In addition, to the above actions, NEAS have a 'longlist' of additional actions which are being considered. Category 2 additional actions continue to be reviewed, refreshed and consolidated with focused weekly update sessions. Recently, the Executive Management Group have been informed that further work has been done on developing the extended scope of the second phase of the HCP project and action owners relating to the longlist have refreshed their actions with further work required on progressing the actions sitting in the clinical directorate. There has been a full review of our Alternative Working Duties policy which is now updated with a clear mandate that all clinicians with a minimum of four months will first be considered for EOC roles.

If it would be beneficial, we can arrange to share the full details of this work with you, certainly for those actions which may be taken forward following further consideration and risk assessment.

On a more general note, the Trust is currently in contract negotiations in respect to funding from our commissioners. We have requested additional funding to enable an increase in resources to help improve service delivery, including improving ambulance response times. I am aware that the contract negotiations include discussions surrounding the wider health and social care system and what other partners can do to assist with easing pressures on the Trust. Factors such as hospital handover delays, availability of other services, demand deflection and inappropriate discharges all create potentially unnecessary demand on the Trust. This is not unique in our region and is a challenge faced by our colleagues in other ambulance services around the country.

In addition to the pressures on our operational crews, the funding request is to help secure further investment into the Dispatch function to reduce the chance of missed opportunities to dispatch an ambulance to patients most in need. As demand for NEAS services has grown, increasing numbers of patients remain on the Dispatch Stack. With workloads on each Dispatch desk growing, NEAS commissioned independent reviews by the Association of Ambulance Chief Executives and Operational Research in Health (ORH). The evidence from these reviews shows that each Dispatch desk has more resources than would be considered appropriate to achieve optimum performance with the resources available. A business case is being finalised for commissioners to consider as part of the 2024/2025 planning rounds. If secured, this investment would support the introduction of a Critical Incident Hub which would increase the number of dispatch officers, therefore reducing the number of resources they overview/dispatch.

I hope that this provides sufficient detail to address your concerns. I must add that some of the planned work is reliant upon the next round of funding negotiations, we would be able to provide an update on the funding negotiations as matters progress.

I hope that this addresses the matters of concern which you have highlighted. [redacted]

Yours sincerely,

[redacted]

[redacted]

Chief Executive