Surrey and Sussex NHS
Healthcare NHS Trust

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Dr Karen Henderson
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By recorded delivery

23 March 2015

Dear Dr Henderson,

Re: Prevention of future death report, following an inquest into the death of Mrs Susan Geraty

I write in response to your prevention of future death report dated 27 January 2015 and received at our Trust on 3 February 2015. As this inquest was heard almost four and half months ago (on 19 September 2014), it has been a little more difficult to understand what is meant by some of the 'areas of concern'. I apologise in advance if you feel I have missed your point on any particular issue.

Your report was addressed to three individuals at the Trust: myself, the Medical Director and the Chief Nurse. The Act requires that "a person to whom a senior coroner makes a report, must give the senior coroner a response to it"[1]. I hope that you will accept this letter as the Trust's joint response to your concerns. In future, I would be grateful if any prevention of future death report could be addressed to me only, so that a single co-ordinated response will result.

Thank you for raising your concerns with me. I was of course aware of the death, our investigation report, your expert report and the conclusions of your inquest.

Trust response to the matters of concern
I will now address each of the areas of concern that you raise:

[1] Coroners and Justice Act 2009, schedule 5 7(2).

1. **Failure to assess, monitor and record post-operative fluid balance.**
2. **Inadequate nursing records.**
3. **Inadequate fluid balance charts.**
5. **Failure to recognise an acutely unwell patient**

Since this incident in 2012, SASH have implemented a number of improvements in the way that it records a patient's fluid balance and in the way that it trains nursing staff with regards to recognising and acting on the identification of an acutely unwell patient and on monitoring post-operative fluid balance.

The new Early Warning Score (EWS) paperwork which complies with the national standard (appendix 1) was launched in January 2014 and training on this has a regular session on the Mandatory and Statutory Training day (MAST). The Critical Care Outreach Team (CCOT) has made a EWS training film, stressing the importance of detecting and managing the deteriorating patient. This is shown to all nursing staff attending MAST training and will be accessible through the Intranet later in the year.

The Organisation-Wide Policy for Patient Observations (Vital Signs) in Adults is updated regularly to reflect the changes in the Trust regarding the paperwork and escalation process and this is available on the Trust's intranet.

An audit of the completion of the EWS chart has been completed but the results are being collated, and will be finalised in April 2015. However, our EWS training has already been changed as a result of the findings to emphasise the importance of completing the frequency of observations and monitoring plan sections correctly. Training is reviewed regularly based on feedback from staff.

The EWS chart now has an SBAR (Situation, Background, Assessment, Recommendation) communication guide section, which outlines a succinct way of relaying information between members of staff. SBAR pads were introduced to the wards in January 2015 (appendix 2). Once completed, the note can be stuck into the patient's medical record. An audit will be conducted later in 2015 to review compliance.

The CCOT have also started to provide a Sepsis/Acute Kidney Injury (AKI) and Fluid Balance Monitoring study day for ward nurses. The morning session consists of teaching sepsis theory followed by relevant case studies. The afternoon session, concentrates on AKI theory and further case studies; the importance of fluid balance monitoring is also included in this session (appendix 3).

Ward based teaching sessions have been held on Newdigate and Leigh wards in January 2015 by CCOT to educate the staff on patient assessment, AKI and fluid balance. These sessions were well received and more sessions are planned for staff during the year.

There is now a named CCOT nurse for the orthopaedic wards, who has worked with the staff on those wards to understand the staff's issues, and has then delivered AKI training to both trained and untrained ward nurses.

Following the publication of 'Improving Outcomes for Patients with Proximal Femoral Fractures' by [redacted] and colleagues at the Queen's Medical Centre in Nottingham, a site visit is currently being arranged. The paper includes measures to significantly decrease incidences of AKI for this type of patient.

Newdigate ward has been refurbished to include bays with increased monitoring and staffing.

ALERT™ courses (a multi-professional course to train staff in recognising patient deterioration and act appropriately in treating the acutely unwell) started again within the Trust last year, which includes a section on AKI and fluid balance charts. BEACH (Bedside emergency assessment course for health care staff) courses will start in April 2015, which will also stress the importance of fluid balance monitoring.

There is a Trust wide audit planned for 2015, to assess the completion of the fluid balance chart to monitor compliance.

Members of SASH staff have attended the Kent, Surrey and Sussex Academic Health Science Network Patient Safety Collaborative AKI day on Wednesday 18th March 2015.

In response to the Patient Safety Alert from NHS England in June 2014 'Standardising the early identification of Acute Kidney Injury,' a medical lead for AKI was appointed for the Trust. From 2nd March 2015, patients identified with an acute reduction in renal function will be identified by the AKI algorithm in Apex, the Trust's pathology reporting tool. All level 2 and 3 results will be phoned through by the pathology team to the requesting doctor 24 hours a day. New messages will show in Apex and Cerner alerting the user to any patient identified with AKI (appendix 4).

Monthly mortality and morbidity meetings are held for all the specialties, to review the management of patients who have died and why. This presents an opportunity to discuss the care received and ensure that lessons are learnt for the future.

4. Failure to respond to legitimate concerns raised by the family

I understand this to be a reference to the lack of action following the abnormal ECG result. This problem was identified in the Trust's investigation report and included as a 'lesson learned'. Our report recommended that in future any investigation should be reviewed by the clinician ordering it, or handed to another clinician if the results are not available immediately. The report also identified that this learning would be shared via the junior doctors induction programme, and ward rounds, to highlight the new procedure.

SASH acknowledges that in this case, the nurse did not follow the normal and expected process of acting upon concerns raised by family. Learning from this incident has been central in the delivery of improvements and cascaded across our multi professional teams. This has been supported by the launch and roll out of our SBAR framework, and the use of patient stories for improvement.

There is now a whiteboard on every ward which details the names of the staff on duty and the name of the consultant in charge of the patient is now above every bed. The wards operate a 'Meet the Matron' scheme, which is advertised on entry to the ward which gives patients and their families the times they are available to discuss any issues they may have.

A notice by every bedside has the contact details for patients or their relatives to raise any concerns (appendix 5)

Contact with patients and their family has been further strengthened by the new Duty of Candour policy. Being Open arrangements have now been designed into the Datix system to ensure the process has been followed when patients have been involved in an incident that has caused a level of harm to the patient (appendix 6).

6. Failure of the SI report to consider or acknowledge dehydration as a possible cause of acute renal failure.

As described above, the SI report was produced many months before the expert suggested dehydration. The SI report had been unable to identify the cause of the hyperkalaemia, in a case which was complicated by a lack of any clinical signs and symptoms of dehydration either in life or at post mortem, and in a patient who had been conscious and documented to be eating and drinking well. The Trust does not agree that the investigation failed to recognise dehydration as the cause of AKI. The consultant who led the investigation felt that there were multiple causes in the deterioration in renal function which he considered at the time, including inadequate fluids, but accepts that this was not explicitly detailed in the report.

In addition, the pathologist, having considered the medical records and the blood results, had stated in his post mortem report: *"Potassium is present within muscle cells and if these are damaged by a rise in local pressure due to haemorrhage; there is a significant risk of muscular damage leading to raised potassium levels (hyperkalaemia). There is clear histological evidence of recent haemorrhage into the soft tissues of the right lower left, and this is associated with histological degenerative changes within the voluntary muscle. It is therefore my opinion that the death was due to a recognised complication of limb trauma and the cause of death is:*

Ia hyperkalaemic cardiac arrest

Ib compartment syndrome

Ic fracture of the right tibia and fibular (surgical repair). "

At the inquest, based on the expert report (which said that compartment syndrome was very unlikely, and that dehydration was likely), the pathologist amended his opinion to 1b to acute kidney injury instead. Our clinicians found the facts to be extremely unusual and not at all easy to explain. Had the pathologist identified an acute kidney injury as a cause of death before the inquest, this may have assisted with this issue having been explored in more detail within the SI report.

All SI reports are reviewed by the Clinical Commissioning Group (CCG) at their Serious Incident Scrutiny meeting. This took place on 18th July 2013 and their response was that they felt the root cause was too long and asked for an assurance that the staff are fully aware of the fractured neck of femur pathway and routine monitoring of post-operative bloods.

The Trust now has a Serious Incident Review Group (appendix 7) made up of multi-disciplinary members which meets fortnightly to review SI investigations and their reports. This presents an opportunity for the investigation team to give a thorough explanation of the investigations findings and a chance to review the report before closure.

Yours sincerely,

[redacted]

Michael Wilson
Chief Executive

Encs.