Oxford University Hospitals NHS
NHS Foundation Trust

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Mr Darren Salter
HM Senior Coroner for Oxfordshire
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2 November 2018

Dear Sir

**Mrs Marion Grant (Deceased)**
**Response to Regulation 28 Report to Prevent Future Deaths dated 11 September 2018**

I write further to your report made to me pursuant to paragraph 7, Schedule 5 of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.

At the Inquest heard on 5 September 2018 you recorded a conclusion of Accidental death and made the following finding:

"*Marion Grant tripped and fell at Magdalen Park, Oxford at approximately 16:30 hours on 14 April 2018. She was assessed but not given DVT prophylaxis and succumbed to a pulmonary embolism at the beginning of the operation on 16 April 2018 to replace the fractured hip*."

I understand that you accepted during the course of the Inquest that the Trust had undertaken an RCA investigation and provided your office with an updated action plan on lessons learnt following the death of Mrs Grant. This gave you reassurance that several measures had already been undertaken by the Trust to reduce the risk of a similar incident occurring in the future.

However, in your report you confirm that there were two matters of concern that you considered required additional action, in order to ensure that future deaths will not occur. Over the last few weeks the Trust has undertaken a number of steps to address your concerns, details of which are set out below.

**"Outlying patients"**

In your report you acknowledge that placing trauma patients on a ward other than a trauma ward may be unavoidable. However, you seek reassurance from the Trust that the audit of care for such patients to check that VTE prophylaxis has been prescribed is taking place and that these patients receive the same standard of care regardless of their location.

To put the Trust's response in context, and in advance of the Inquest heard on 5 September 2018, the Trust had already put in place a number of steps to address the concerns raised above. This included an audit undertaken by the Clinical and Governance Lead for Trauma at the end of August to benchmark the standard of care provided across the Trust for trauma patients. I readily acknowledge that the audit results confirmed there were discrepancies across the Trust in the management and administration of VTE prophylaxis.

Further, the Clinical Nurse Specialist had already been tasked to review outlying patients on a daily basis to check that appropriate VTE prophylaxis is being prescribed to all relevant patients who are not based on the trauma wards, prior to the Inquest itself.

In practice, the Clinical Nurse Specialist undertakes this review during the week and at times when not available, or during the weekend, this task is passed onto the Trauma Nurse Co-ordinator. This ensures that VTE prophylaxis for trauma patients on wards outside of the trauma unit is checked by a senior member of the trauma nursing team on a daily basis.

At around the time that your report was issued, the audit undertaken in August 2018 was reviewed to check that outliers were receiving VTE prophylaxis as they would on the trauma wards and a decision made to defer the next audit (which was due to be undertaken in September 2018) until December 2018. The reason that the planned follow up audit has been deferred is two-fold.

Firstly, to allow the new systems described above to become more embedded within the Trust.

Secondly, and perhaps of more significance, it has been acknowledged that the number of trauma patients that may be cared for on wards outside of the trauma department can vary significantly day to day. For example, there may only be 2 trauma outliers on one day and then on another day, there may be up to 17 outliers, as included within these figures, are patients who fall under the shared care of other teams (such as the intensive care team or the plastics' team) and are not necessarily pure trauma outliers on wards that do not specialise in trauma cases.

Therefore, and in order to make the audit more meaningful, a decision to defer the audit to allow a sufficient number of patients to be included in the next audit was deemed to be more appropriate and helpful in assessing whether the new systems you were notified about at the Inquest have resulted in equality of treatment of patients regardless of which ward they are treated on.

I would be delighted to share the result of the next audit, due to be published in January 2019 with your office, should that be of interest.

In addition to the steps above, the Matron for the trauma team also checks, at the daily multi-disciplinary meetings that, the reviews described above are actually taking place. Her perception of the new systems is that it is working well.

By way of example, the Matron has confirmed that two cases have been brought to her attention where intervention by the trauma team has influenced when VTE prescription should be applied.

The first example was to spot that an isolated VTE assessment had not been completed therefore ensuring that steps could be taken to ensure the assessment took place within the time periods expected by the Trust.

The other case related to the timing of the VTE prescription. It was spotted that the timing of the administration of the VTE prophylaxis needed to be amended in light of the timing of the planned emergency surgery to ensure that the administration of the VTE prophylaxis would not compromise the surgeon's ability to proceed with the planned surgery. I understand that were alerted during the Inquest to the fact that surgery may not proceed if VTE prophylaxis is prescribed and administered to close to the planned surgery.

The Matron for the trauma department was also able to confirm that she regularly observes that the trauma team consultant surgeons also check that VTE assessments and prescriptions are being carried out on all new patients regardless of where they are based.

In addition to the above, the Trust is training one of the Deputy Sisters to become a Nurse Prescriber. It is anticipated that when she has completed her training in the New Year, she will be able to prescribe VTE prophylaxis which will add to the clinical resources available to ensure that VTE prophylaxis is prescribed in a timely manner.

**Ignoring VTE alerts on EPR**

Your second concern relates to the note made in the RCA that, by the time of the surgery on 16 April 2017, the electronic patient record ("EPR") had been accessed 27 times by staff members but not one of the staff interviewed recalled seeing the alert. In addition, it was explained during the course of the inquest by one of the doctors giving evidence that if doctors do not exit the EPR, the alert does not appear. Clarification has been sought on this issue together with a request that your concern that alerts on EPR are not being acted upon has been recognised and acted upon.

In order to respond to this concern, it may be helpful to explain how electronics alerts were used prior to the death of Mrs Grant and what has changed following her death.

Prior to the Inquest of Mrs Grant, the Trust was using soft electronic alerts in relation to unprescribed VTE prophylaxis. Therefore, and as in the case of Mrs Grant, when a VTE assessment had been completed and the assessor agreed that VTE prophylaxis should be prescribed, when the individual operator of the electronic record sought to leave the patient page, an alert would pop up on the screen alerting the operator that VTE prophylaxis had not been prescribed, should this action remain outstanding. This alert would continue to pop up on the screen when subsequent operators logged in to the patient record until it was actioned.

This soft pop up alert was one of a number of soft pop up alerts which a member of staff might see upon exiting or entering the patient record EPR screen. Other examples of soft pop up alerts included an alert that IV fluids may have been prescribed for over 24 hours and may need to be reviewed, a weekly weight measure may be overdue and /or perhaps a risk assessment for capacity may be required.

Prior to the Inquest concerning Mrs Grant each individual operator could override the soft pop up alert without needing to action the substance of the alert raised and the Trust were aware that there were so many soft alerts that operators may not recall seeing the alert at all.

As a direct result of the death of Mrs Grant and a few days prior to the Inquest, the Trust launched a new system which meant that doctors are unable to exit the EPR until the VTE alert has been dealt with (a hard pop up alert). In practice, this means that the alert confirming that prescription of VTE prophylaxis is required, cannot be overridden until the drug has actually

been prescribed. It does not matter whether the individual is exiting the system or simply moving on to the case details of another patient. No further step can be undertaken until the alert has been actioned. It is only if the alert is a soft alert that the alert may be side stepped as described at the Inquest.

An audit of the efficacy of this new system is due to be undertaken in January 2019. Again, I would be happy to share with you the outcome of the audit if this would be of interest to your office.

A preliminary spot check on the system has however revealed that the system is working well and subject to a minor glitch (in that the system needed to be modified in the ICU department, where VTE assessment and prescribing are undertaken in separate systems), compliance with prescribing VTE prophylaxis is now being captured in a timely manner.

Recognising the importance of VTE prophylaxis and also taking into account operator "alert fatigue" the Trust are in the process of streamlining and adapting the way in which alerts are brought to the attention of clinical staff.

For example, the soft alerts referred to above are going to be incorporated within the EPR so that they appear within a sidebar of the EPR record rather than as a pop up alert. The Trust is also seeking to reduce the hard pop up alerts to key issues such as VTE prophylaxis and sepsis. This change seeks to ensure that essential overlooked tasks are actioned but that other alerts (which may not require immediate action) do not cloud those tasks that need to be rectified before the clinician moves on to the next EPR or exits the system.

Other IT developments in the pipeline include the development and deployment of an electronic 'white board' for use by authorised users (for example a ward manager) and ward staff so instant access can be ascertained with regard to the relevant cohort of patients to check what outstanding tasks remain outstanding for each patient. This framework will also be deployed for individual clinician worklists as described below.

Concerning VTE prophylaxis, the planned development is that reference to VTE prophylaxis will be displayed as per a traffic light (red, amber, green) so that the appropriate operator can immediately ascertain which patients need immediate review to ensure the correct VTE assessment and / or prescription has been actioned, thus adding another safety net into the system in addition to those already described above.

The IT team are also seeking to expand upon the personal electronic work lists currently used by the pharmacists so that personal work lists can be created for each individual doctor in the Trust.

In relation to nursing staff, the IT department are seeking to introduce work lists for nursing staff so that in instances where, for example VTE prophylaxis has not been prescribed, an alert will be created on the individual nursing staffs' work list, again introducing another safety net in to the system.

**Conclusion**

Following the investigation into the care provided to Mrs Grant in the lead up to her death, the Trust has always accepted that there were missed opportunities to provide VTE prophylaxis to Mrs Grant in advance of her surgery to repair her fractured hip.

Although it is not possible to ascertain whether the fatal pulmonary embolism would have been avoided had VTE prophylaxis been administered, the Trust has undertaken a significant number of steps to ensure a future death does not occur in the same circumstances.

Not content with the immediate steps that were taken to prevent a future death in the same circumstances implemented in advance of the Inquest, we have continued to develop and seek to improve upon the Trust's wider systems which will not only provide additional safety nets in relation to VTE prophylaxis but also in relation to much wider aspects of patient safety generally.

Whilst the events that occurred to Mrs Grant in the lead up to her death cannot be changed, the Trust and I sincerely hope that the additional steps taken as outlined above provides reassurance to Mrs Grant's family and to your office that all steps possible have been taken to address the concerns referred to in your report.

If I can be of any further assistance in this regard, please do not hesitate to contact me.

Yours faithfully

**Dr Bruno Holthof MD PhD MBA**
Chief Executive