

Executive Corridor
Darlington Memorial Hospital
Hollyhurst Road
Darlington,
DL3 6HX

[REDACTED]

27th March 2024

Rebecca Sutton,
Assistant HM Coroner,
County Durham

Dear Ms Sutton,

Re: Emily Harkleroad

We are writing in response to your request for the Trust to take action in relation to the absence of RAG rating on the Emergency Department (ED) display screen in Oracle Cerner Millennium to prevent future deaths, which you issued to County Durham & Darlington NHS Foundation Trust following the patient's inquest held on the 05th February 2024.

The Trust would like to offer, once again, its sincere condolences to Emily's family for their loss. We take very seriously the concerns which you have raised and have provided a detailed response below. In summary:

- When implementing the Oracle Cerner Millennium system we put in place additional functionality to help clinicians to recognise and act on patient deterioration, which improved upon the previous system in terms of ease of access, decision support and the detail of patient observations available to clinicians on the main dashboard.
- We discussed with Oracle Health the potential to add and display RAG-ratings based on the patient's Early Warning Score for go-live and were, at that stage, advised by the work-stream leads allocated to the Trust that it was not possible. We subsequently logged a further request from the ED teams for this functionality, internally, to discuss with Oracle Health for future development.
- The Emergency Department at UHND had, with the support of our Patient Safety Leads, already put an action plan in place to learn from this case, in particular to address issues with the way in which the new functionality above was used.
- Following your letter of 5th February 2024, and discussions with Oracle Health we have expanded that action plan to include collaboration with Oracle Health on the addition of a further column to the ED Screen, which will RAG-rate patients' Early Warning Scores as 'High', 'Medium' or 'Low' with colour coding. It is understood that Oracle Health are looking to make this functionality available as part of their standard upgrade programme from around the middle of this year. We note below further actions, either already implemented or in progress, to mitigate risk.

Implementation of Oracle Cerner Millennium

The Oracle Cerner Millennium system was implemented in October 2022 across the Trust's acute hospitals, including its Emergency Departments. It provides three key applications for the use of the ED team:

- **Medanets:** A mobile application which enables staff to capture patient observations from hand-held devices, calculates national early warning scores (NEWS) and provides decision support for clinicians. The Emergency Department did not have this functionality prior to the implementation of Oracle Health and it was put in place to enhance patient safety. More information on Medanets is outlined below. It includes a RAG-rated view as shown in Appendix A.
- **Firstnet:** This application allows for data entry and management and supports functionalities including registration, triage and tracking of patients through their Emergency Department encounter and nursing documentation.
- **Launchpoint:** This is a dashboard view available on Firstnet which can be used to manage and monitor all patients within the Emergency Department. Clinicians can monitor test requests, workflow and key patient information. Launchpoint is the main interface through which the clinical team can view data entered through Firstnet.

The previous ED system, Symphony, was replaced as part of this roll out. Symphony did have a RAG-rated display based on Early Warning Scores. It is now the Launchpoint dashboard that provides the equivalent view to that which would have been available in Symphony. Whilst Launchpoint did not provide a RAG-rated view based on early warning scores in the same way as Symphony, there was an alternative view available, the "Emergency Department list", which displays the patient list so that the highest early warning scores are at the top of the list. Launchpoint is also more detailed and captures the individual observations whereas Symphony only captures an aggregated view. Appendix B shows views of the dashboards in both Symphony and Firstnet, both the Launchpoint and Emergency Department dashboards, (including the new view with the RAG-rated EWS column in development and outlined further below).

The ED team requested the same functionality as that in Symphony as part of the Oracle Health system at go-live and this request was discussed with Oracle Health's work-stream lead who advised it was not feasible at that time. Taking account of the additional safety functionality introduced into the department through Medanets and the overall functionality of Launchpoint, the Trust judged the patient safety risk to be mitigated.

Subsequent to the roll out of the system, the Emergency Department made a further request for a RAG-rated view based on early warning scores and, given the previous advice from Oracle Health, this was logged internally as a potential future development.

Medanets - Developments for Deteriorating Patient in ED

Before adopting Cerner Millennium, the Trust utilised Nervecentre across all wards. Nervecentre, compatible with both Android and Apple devices, allows for the recording of patient observations, calculation of NEWS scores, and provides decision support to clinicians while automatically escalating any concerning NEWS scores to the nurse in charge and the junior doctor, thereby alerting them to a patient's deteriorating condition. Recognising that Oracle Cerner Millennium lacked this specific functionality, Oracle Cerner collaborated with Medanets, a third party, to ensure these essential mobile capabilities were retained.

While Nervecentre was not previously implemented in the Emergency Department, it was decided to introduce Medanets into the ED to provide staff with real-time decision support available to ward staff and enforce policies regarding patient escalation, thereby enhancing patient safety.

The Medanets mobile application, which includes a two-way interface with the Electronic Patient Record (EPR), enables bedside recording of observations. It provides staff with essential decision support and guidance on patient escalation. Appendix A includes images of Medanets patient lists, which utilise a RAG rating system, along with examples of the decision support and escalation processes. The application is accessible on Zebra devices — similar in size to smartphones — and tablets. These devices have been available in inpatient wards and the ED (except for escalation messages) since the system went live on 10th October 2022.

Coroner Request to Ask Newcastle

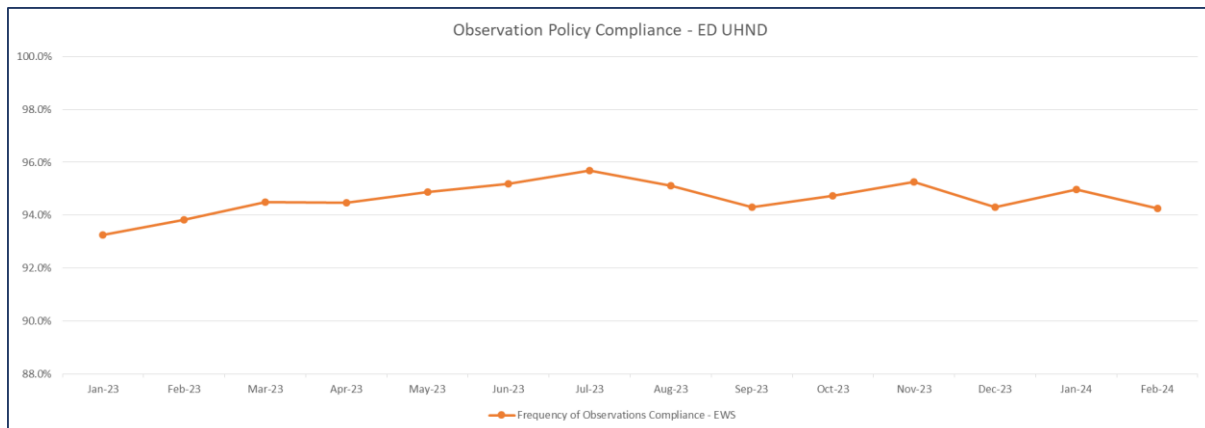
At the inquest HM Coroner asked that we consult with Newcastle to explore how they review their patients on patient lists / screens. From correspondence with the Chief Nursing Information Officer at Newcastle the following was established:

- Newcastle do not have big screens in the department as at CDDFT, they view the patient lists on desktops.
- CDDFT use 'ED Launchpoint' as the screen on display in the department, Newcastle do not have this screen on their version of Firstnet.
- Newcastle use the 'Emergency Department' list for their landing page / patient list. They have added colour to the EWS and any NEWS of 5 or above is red.

Improvement work since Go Live

In 2023, it was observed that ED teams were predominantly entering observations directly into Millennium via desktop computers, mirroring their previous method with Symphony, rather than utilising the provided mobile devices with the Medanets application. This practice results in a loss of decision support for the staff. In the case of Emily, two out of the three sets of observations taken were recorded directly into the desktop and not the Medanets application. Consequently, considerable efforts have been undertaken to ensure that ED staff fully utilise the mobile Zebra devices and, by extension, the Medanets application for recording observations in the ED. These efforts included providing support directly at the point of care, formal training, and regular updates on compliance through key messages.

Compliance with the ED observation policy, particularly whether observations were repeated within the required timeframes based on the score, is reviewed during monthly Quality and Performance meetings. The compliance data, which encompasses 100% of the observations recorded in the Oracle Cerner Millennium each month and is broken down by individual areas, is meticulously monitored. The data presented below pertains specifically to the UHND Emergency Department, which is relevant to this Regulation 28 notice. On average, compliance has reached 95%.



Planned Actions

The action plan that accompanies this letter is the action plan from the Urgent and Emergency Care Group's original investigation, now extended to include Trust's actions in response to Regulation 28. To summarise, the actions include:

- Activating escalation alerts within the Emergency Departments.
- Deploying two tablets in each Emergency Department for use by the nurse in charge and the Emergency Practitioner in Charge (EPIC), enabling them to receive alerts and access the dashboard.
- Collaborating with Oracle Cerner on the development of column with a RAG rating for the Early Warning Scores shown in Launchpoint. This is illustrated on the final slide included in Appendix B. We understand that Oracle Health are looking to make this functionality available for clients as part of their standard upgrade programme, from around June 2024.

Improvement work already undertaken in relation to physiological observation recording and deteriorating patient escalation can be found in Appendix A.

Enclosures

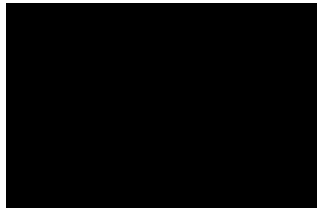
Appendix A – Demonstrates the Medanets functionality and notes actions which have been, or are being taken, to embed its use

Appendix B – Shows the different A&E Dashboards including the view in Symphony, views in Launchpoint (including the view sorted by the EWS) and the new view on which we are working with Oracle Health.

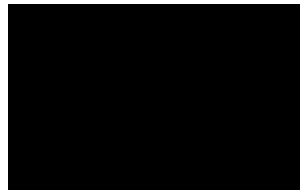
Conclusion

We trust that the measures already implemented and those planned are sufficient to address the concerns you have highlighted. However, please feel free to contact us if you need any additional information or have further queries.

Yours sincerely




Executive Director of Nursing




Executive Medical Director

cc. 

