

Board of Directors (in public)

Item 3.1a

Subject: Secure Health Messaging and Radiology Alert Responses
Retrospective Audit and Improved Audit Metrics and Dashboard

Date of Meeting: Tuesday 23rd September 2025

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Presented by: Manoj Kuduvalli, Medical Director

Purpose of Report: To Note

BAF Reference	Impact on BAF
BAF1	Potential patient harm

Level of Assurance (please tick) To be used to provide the Board / Committee with a guide on the extent of assurance and evidence of assurance provided within the report.		<input checked="" type="checkbox"/>
Level of Assurance	Description	
High	There is a strong system of internal control which has been effectively designed to meet the system objectives, and that controls are consistently applied in all areas reviewed.	<input type="checkbox"/>
Substantial	There is a good system of internal control designed to meet the system objectives, and that controls are generally being applied consistently.	<input checked="" type="checkbox"/>
Moderate	There is an adequate system of internal control, however, in some areas weakness in design and/or inconsistent application of controls puts the achievement and some aspects of the system objectives at risk.	<input type="checkbox"/>
Limited	There is a compromised system of internal control as weaknesses in the design and / or inconsistent application of controls puts the achievement of the system objectives at risk.	<input type="checkbox"/>
No	There is an inadequate system of internal control as weaknesses in control, and/or consistent non-compliance with controls could/has resulted in failure to achieve the system objectives.	<input type="checkbox"/>

1. Executive Summary

- Secure Health Messaging (SHM) is a radiology alerting system for incidental and unexpected results in radiological investigations
- The acknowledgement and documentation of actions of these radiology alerts on EPR is through a document titled Radiology Alert Response (RAR)
- The Trust target for completion of RARs is 95% and this metric has underperformed for a prolonged duration, the underperformance mainly driven by less than ideal audit metrics
- This paper summarises the improvement in the audit metrics and the dashboard, and also the outcome of a retrospective audit of SHMs without RARs for a three year period between April 2022 and March 2025.

2. Background

Secure Health Messaging via the Allscripts EPR platform is a radiology alerting system for incidental and unexpected findings in radiological investigations done at LHCH. This system has been in place at LHCH since 2016. SHMs alert the presence of an unexpected incidental finding to the clinician requesting the radiological investigation with suggested further investigations if appropriate, or simply for action as per the discretion of the clinical team. Acknowledgement and actioning of the alert is recorded on EPR in a document titled 'Radiology Alert Response'. The process has been subject to continuous audit end to end from sending of an SHM, opening an SHM and completing a Radiology Alert Response document on rolling three monthly basis. This data is presented weekly as part of the Executive Quality and Safety Report and is part of the Divisional Dashboards and the Strategic Oversight Framework which is presented at Operation Board and Board of Directors. The target is to achieve RAR completion for 95% of alerts and this target has not been achieved consistently.

The Divisions, through access to the dashboard, inform clinicians of overdue responses (beyond 28 days of the SHM being issued) and encourage completion.

3. Actions taken

There were deficiencies identified in the audit tool which were likely driving the underperformance in the audit outcomes. The main issue was the difficulty in matching the RAR to the appropriate SHM alert. This was relatively straightforward if a patient had just one radiology alert. However, when a patient had more than one alert, matching the RAR with the appropriate alert became more difficult and was managed by employing matching criteria using dates and the same client visit (so called 'fuzzy' matching). This was because the existing SHM reconciliation process was developed outside the data warehouse. It combined data from CRIS and EPR and as such required a high degree of 'fuzzy' matching. This led of inaccurate patient level data being used by the Divisions in encouraging clinicians to complete the missing RARs, leading to frustration from clinical colleagues that they were often being asked to complete documents that they had already completed but the audit tool had failed to pick up for the reasons above. This resulted in reduced clinician engagement in the process.

The new process has been developed in the data warehouse and only uses data recorded on EPR. This now enables inclusion of the unique identifiers for the Order, Result and SHM on creating the new RAR. The system now automatically identifies the latest SHM without an existing RAR containing its SHM message ID and then populates the three separate keys into the new RAR. If there is no SHM without an RAR, then the user is invited to manually enter the Message ID from the SHM alert list. With this way of definite matching of the SHM with the RAR, the audit tool can now identify SHMs without corresponding RARs with a significantly greater degree of accuracy. The new process is now reflected in the live dashboard and applies to SHMs and RARs recorded since the end of May 2025 and will also

be reflected is the data presented in the SOF. The Divisions will continue to monitor and manage completion of RARs using the new dashboard.

Using the improved way of identifying SHMs with missing RARs, a retrospective audit of missing RARs between April 2022 and March 2025 was undertaken. This period was chosen as a previous exercise had been undertaken to reconcile missing RARs prior to April 2022 and this report had been presented to Quality Committee in April 2022.

This retrospective audit informed us that 4755 (93.8%) of the 5064 alerts issued during this period could be matched to an RAR. This was a significantly higher completion percentage compared to what had been presented in the SOF for this period. There were 288 SHMs (5.7%) without a matched RAR and also 21 alerts (0.4%) for whom an SHM had not been issued at all.

A clinical review of the 288 SHMs without RARs and the 21 alerts without an SHM being issued was completed by the clinical teams based on the patient level data provided by the data analytics team. No harm linked to the radiology alert was identified in 307 of the 309 alerts reviewed. In a significant proportion of patients, the alert had been clinically reviewed and actioned if necessary, though the RAR had not been completed. Of the remaining two patients, further information is being sought through their local clinical teams. One patient from the Isle of Man was identified as potentially not having had a repeat CT scan to follow up a small lung nodule (this patient did not have an SHM issued for this finding) and this is being clarified through the patient's GP. Another patient from Rochdale had consolidation on his chest X ray which had remained unchanged after 6 months. It is unclear if the patient has been further investigated in their local area and this information is being procured.

Some further discussion and improvement is being considered around the process through which SHMs are issued to reduce the number of duplicated SHMs for the same investigation.

4. Conclusion

The audit tool and the dashboard have been improved using better and more accurate matching between SHMs and their related RARs. This will improved accuracy of reporting RAR completion and also enable the Divisional teams to better monitor and manage the completion of RARs. The retrospective clinical audit of missing RARs has not revealed any harm so far, though information on two patients is still awaited from their local clinical teams.

5. Recommendations

The Board of Directors is requested to note the content of this paper.