

## Board of Directors (in Public)

### Item 2.1

Subject: Learning from Deaths Quarterly Report – Q3 2024/25  
 Date of Meeting: 25<sup>th</sup> March 2025  
 Prepared by: Neil Coulson, Chair – Mortality Review Group  
 Manoj Kuduvalli – Medical Director  
 Presented by: Manoj Kuduvalli – Medical Director  
 Purpose of Report: For Noting

BAF Reference	Impact on BAF
BAF 1	The report provides assurance regarding learning from deaths, and possible avoidable patient harm.

<b>Level of Assurance (please tick)</b> 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"/>
<b>Level of Assurance</b>	<b>Description</b>	
<b>High</b>	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"/>
<b>Substantial</b>	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"/>
<b>Moderate</b>	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.	
<b>Limited</b>	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"/>
<b>No</b>	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**

Guidance on learning from deaths was published by the National Quality Board in March 2017 and was presented to the Board of Directors in May 2017. Quarterly reports have been presented to the Board of Directors since.

Deaths are categorised as to the likelihood of being avoidable or not (on balance of probability >/< 50:50) and the data collected centrally each quarter.

The mortality dashboard year to date has been presented at the Board of Directors in Public and this report includes organisational learning from deaths.

This report also includes any available updates from previous reports.

## **2. Background**

The learning from deaths guidance has a strong emphasis on organisational learning from all deaths rather than from just preventable or avoidable deaths. The definitions of preventable/ avoidable deaths have been revised. The threshold of defining preventable/ avoidable death is now on the basis of more likely than not encompassing the categories of definitely avoidable, strong evidence of avoidability and probably avoidable (greater than 50:50). Deaths are classified using the RCP (Royal College of Physicians) methodology unless they occur in individuals with an identified learning disability. In those individuals LeDeR (Learning Disability Mortality Review) methodology is used, and a full review carried out without prior screening.

When cases have been reviewed by the MRG (Mortality Review Group) the action logs are sent to the divisions to review in divisional governance. The action log will include when the case is also to be reviewed during the relevant audit day. Joint Cardiology, Surgery and Anaesthesia audit days are held every two months where all relevant reviews are presented and learning discussed and shared. Respiratory Medicine have their own audit days where similar discussions occur.

The Divisions also track action plans arising from learning points. This data will be triangulated with Dr Foster (Telstra Health) data, InPhase, complaints, coroner's cases and audits. This will facilitate system identification of common themes and cross reference to RCAs, divisional minutes and MRG outcomes. Every month at Operational Board the Divisions present a session on organisational learning (not necessarily related to deaths). All deaths have an initial review by the Deputy Director of Nursing to assess any issues raised by families and carers. The responsible Consultant or an ITU Consultant will invariably have spoken to families at the time of death. Further discussions with families unable to meet immediately after the time of death are offered the opportunity at a time convenient to the family. Any concerns raised by the families after a period of reflection are responded to and where appropriate investigated. If the death is considered avoidable or classed as an incident full duty of candour is exercised and any resultant RCA discussed with families.

Engagement with families has been enhanced by the establishment of the medical examiners who oversee the death certification process and the medical examiner officer who discusses concerns with families. The Medical Examiners and Medical Examiner Officer

discuss issues raised by families at the time of death certification. The ME service has become a statutory requirement as of 9<sup>th</sup> September 2024.

### **3. Report for Q3 2024/25**

There have been 45 deaths in the trust between October and December 2024. Forty-three (95.6%) of these deaths have been through the complete mortality review process. There have been no deaths in patients with an identified learning disability.

In interpreting the accompanying spreadsheet and Appendix 1, it should be borne in mind that there may be an adjustment of the previous quarter's assessment of avoidability. This is because some of the returned full reviews will subsequently have been recalibrated by the mortality review group at their monthly meeting. Some cases rated by reviewer as less than 50:50 may have been deemed avoidable by the MRG and vice-versa.

Of those that have undergone a full review process in Q3 24/25 (43 reviews) three deaths (7.0%) have been classified as probably avoidable (RCP 3)

One death (2.3%) was classed possibly avoidable but not very likely (RCP4); five deaths (11.6%) were classed as slight evidence of avoidability (RCP5); thirty-three deaths (76.7%) were classed as definitely not avoidable (RCP6).

### **4. Learning from Deaths Q3 (2024-25)**

A report on the deaths at LHCH in Q3 of 2024-25, including a summary of the MRG review process, the main causes of deaths, and a summary of organizational learning is presented in appendix 1.

### **5. Conclusions**

The Trust complies with national guidance and populates the mortality dashboard. There is a rigorous review process for all deaths within the Trust. Learning from these deaths is shared widely through Divisional Boards, clinical audit meetings and also by uploading relevant presentations to a mortality SharePoint page which can be accessed at any time.

### **7. Recommendations**

The Board of Directors is requested to note the report.

## **Appendix 1- Learning from deaths Q3 2024-2025 data**

LHCH Mortalities 2024/25 Quarters 1-3 – All Deaths					
	Screened no Review	Screened Review Complete	Screening	Under Review	Total Deaths
Quarter1	43	9	0	0	<b>52</b>
Quarter2	35	12	0	1	<b>48</b>
Quarter3	33	10	0	2	<b>45</b>
Quarter4					
<b>Total</b>	<b>111</b>	<b>31</b>	<b>0</b>	<b>3</b>	<b>145</b>

LHCH Mortalities 2024/25 Quarters 1-3 – Reviewed Deaths					
	Definitely not Avoidable	Slight evidence for Avoidability	Possibly Avoidable, but not very likely, less than 50-50 but close call	Probably Avoidable, more than 50-50 but close call	Total
Quarter1	46	3	2	1	<b>52</b>
Quarter2	40	4	3	0	<b>47</b>
Quarter3	33	5	1	3	<b>43</b>
Quarter4					
<b>Total</b>	<b>119</b>	<b>12</b>	<b>6</b>	<b>4</b>	<b>142</b>

Main Cause of Death - Cardiac Surgery	n
High risk Procedure	5
CVA	4
Other	4
Respiratory failure	3
Pre-procedural moribund state	3
Heart failure – RV / LV	3
Pre-existing Pathology	3
Sepsis	2
Myocardial Infarction	2
Post-procedural bleeding / Tamponade	2
Mesenteric ischaemia	2
Technical procedural issue inc Myocardial protection	1
Hypoxic brain injury	1
<b>Total</b>	<b>35</b>

Main Cause of Death - Thoracic Surgery	n
Respiratory failure	5
Sepsis	2
Other	2
Pre-existing Pathology	2
CVA	1
Aortic occlusion	1
Pre-procedural moribund state	1
<b>Total</b>	<b>14</b>

Main Cause of Death - Medical Division	n
Heart failure – RV / LV	21
Myocardial Infarction	17
Pre-procedural moribund state	15
Other	13
Hypoxic brain injury	7
Unheralded arrhythmia	6
Pre-existing Pathology	6
Sepsis	3
Post-procedural bleeding / Tamponade	2
Mesenteric ischaemia	1
High Risk Procedure	1
General deterioration in the v elderly	1
<b>Total</b>	<b>93</b>

#### Summary of data

Month	% Reviewed ≤30 Allocation for Review	% Reviewed OR Screened no time frame	Deaths	Reviewed	Reviewed ≤30 allocation
Apr-24	80%	100%	15	15	12
May-24	94%	100%	17	17	16
Jun-24	85%	100%	20	20	17
Jul-24	76%	100%	17	17	13
Aug-24	88%	100%	17	17	15
Sep-24	86%	93%	14	13	12
Oct-24	69%	100%	13	13	9
Nov-24	83%	94%	18	17	15
Dec-24	71%	93%	14	13	10
<b>YTD</b>	<b>82%</b>	<b>98%</b>	<b>145</b>	<b>142</b>	<b>119</b>

- There have been 45 deaths in the trust in Q3 of 2024-25. For comparison, there were 60 deaths during Q3 in the year 2023-2024.
- Of those 45 deaths, 43 have completed either a full review or a screen to determine avoidability, underlying cause of death, and to identify any learning. The outcomes of 2 reviews are still awaited, therefore their finalised avoidability is yet to be determined.
- Of the 43 completed reviews, there have been 3 deaths that were determined to be probably avoidable (RCP 3). The details of these deaths and key actions are highlighted below.
- Of the 45 deaths reviewed, 33 have undergone only a screen and 10 have undergone a full structured judgement review. 2 deaths are still awaiting completion of a full review.
- As of the February MRG meeting, eight deaths that occurred in Q3 have been discussed. There was no meeting in January, due to a lack of cases to be discussed. Outstanding screens and reviews will be discussed in the forthcoming MRG meetings.
- Cumulative data for the main cause of death is presented for both Q1, 2 and 3. A significant number of deaths fall under the “other” category. Further work will need to be done to determine if further categories for cause of death need to be created to allow more accuracy in recording of this data.
- Completion of screens and reviews within the recommended timeframes is comparable to previous quarters. This is still an area of focus to improve the timeliness of the completion of reviews.

### **Key themes, notable cases and actions**

#### **Cardiology**

- There have been a series of deaths either following or during a TAVI procedure. The exact mechanism of the complication that resulted in death has not been the same every time, however, there have been several deaths related to annular rupture during balloon inflation. Although no strong avoidability was found in any of these cases, this a series of deaths in a short period of time in patients undergoing a TAVI. The cases have been discussed at the TAVI M and M meeting and any learning will be shared at the next joint audit meeting and via the MRG.
- A patient died during a percutaneous pulmonary valve insertion for carcinoid heart disease, due to bleeding from an iliac vein. The death was deemed by the MRG as probably avoidable as there may have been technical aspects during the case that led to the bleeding, and there may also have been a failure to recognise the cause of deterioration as bleeding, which led to the wrong management plan being instituted. Based on avoidability, a PSII has been instigated. Many learning points have already been identified and actioned by the cath lab team. The PSII will focus on the skill mix and experience of the operators to perform a complex case such as this one, any technical issues that could have been avoided, and the dynamics of the team involved in terms of identifying the cause of the deterioration and leadership in the face of crisis. The PSII will be brought back to the MRG for further discussion.
- A patient was transferred from a local DGH following an acute coronary syndrome. He arrived at LHCH in the afternoon and was found to be in intermittent 2:1 heart block but had no ongoing chest pain. He was taken to cath lab late in the late afternoon/early evening for angiography. The angiogram demonstrated severe diffuse coronary disease, and an attempt was made to perform PCI to the circumflex artery which resulted in a cardiac arrest from which he could not be resuscitated. It was deemed by both the full reviewer and MRG that attempting to PCI the circumflex was inappropriate in this setting and that the patient should have been discussed at an MDT for potential surgery. The death was therefore deemed avoidable and a PSII is being undertaken to review the decision-making process and other factors such as

operator fatigue and support out of hours. The PSII will be brought back to the MRG for further discussion.

- A patient was admitted to RLUH with severe aortic stenosis, poor LV function and fast AF. She was transferred to LHCH for consideration of TAVI but was assessed and deemed appropriate for surgical AVR and was therefore listed for surgery a week or 2 later. She was medically managed on the ward but showed signs of deterioration with worsening heart failure, followed by a subsequent cardiac arrest while mobilising to the bathroom from which she could not be resuscitated. Although the death was deemed as possibly avoidable but less than 50:50, important learning was identified. The combination of severe AS/fast AF/and poor LV is a very precarious situation and needs close monitoring and management. This patient was managed on the ward environment when escalation to CCU may have been more appropriate. This would have allowed for more regular senior clinician involvement in her care and may have led to more expedited surgery. An important discussion point was also highlighted around the requirement or not for an invasive coronary angiogram for a patient requiring an AVR, in whom a CT coronary angiogram has already been performed. This case will be discussed at the next combined Cardiology, surgery and anaesthesia audit day later this month.

### **Thoracic surgery**

- A patient underwent a VATs pleural biopsy for a recurrent pleural effusion which had been tapped previously but had provided an inconclusive diagnosis. She had a background of alcoholic liver disease and was likely still drinking to excess. The procedure was uneventful, but she represented several times with wound discharge and a subsequent infected pleural space/empyema. This was managed with antibiotics and a subsequent chest drain. She required several admissions to POCCU with sepsis and renal failure. Her liver function slowly deteriorated during her admission which was discussed with the liver team at Aintree. They provided advice but did not physically review or offer to take over her care. She slowly deteriorated and eventually a palliative approach was taken. Important learning was identified around physician input into surgical management, and whether there is scope for improving this at LHCH. There are ongoing discussions around this, with potential respiratory physician input into thoracic surgical patients. This case was discussed at the January audit day to disseminate learning.

### **Cardiac surgery**

- A patient presented to a local DGH with chest pain having previously undergone an aortic dissection repair in another country 5 years ago. A CT scan demonstrated a dilated ascending aorta, and what was also reported later to be a severe Type B dissection. This information was not apparent at the time of referral to LHCH, and the team at LHCH did not review the imaging. Further review and reporting of the scans reported a leaking DTA which was discussed again with LHCH and immediate transfer was advised. There were delays in transferring the patient to LHCH due to the categorisation of the urgency of transfer with NWAS. The patient arrested and could not be resuscitated shortly after arrival on ITU. This death was deemed as having strong evidence of avoidability and has already undergone a PSII involving LHCH, Whiston and NWAS. Learning has been identified around no formal means of documenting and tracking referrals to LHCH, review of imaging from other trusts, workload of the aortic fellows and categorisation of transfer urgency with NWAS. An action plan has been created and will be discussed at audit day.
- A patient underwent an AVR in Sep 2024 and was discharged home well 5 days later. He then presented to Chester Hospital in Nov 24 generally unwell with some vague cardiac symptoms. He underwent a CT scan which in retrospect demonstrated

a root abscess, but this was missed by the reporting radiologist at Chester. He was discharged home but represented with sepsis and subsequently diagnosed with staph endocarditis. A further CT scan was done which confirmed a root abscess. He was transferred to LHCH a week later but was too unwell to undergo surgery and unfortunately passed away. This death was deemed as being probably avoidable on the basis of the missed diagnosis of a root abscess, and therefore the missed opportunity to operate sooner. This was an early case of PVE so the infection prevention team have reviewed and provided assurance that appropriate surgical site infection measures were followed during his initial operation. The care at LHCH was deemed good but contact has been made with Chester to review how the diagnosis of a root abscess was missed.

### **Follow up of actions and ongoing plans**

- As highlighted from previous mortalities and in previous reports, concerns have been highlighted about the failure to escalate unwell patients to senior medical staff. An escalation policy has been developed and agreed with key stakeholders including the ANPs and ITU and Cardiac Consultant bodies. This is now in established clinical practise and provides a clear structure for the escalation of unwell patients, particularly out of hours. Initial feedback has been positive and there is definite evidence of earlier calls to senior medical staff out of hours.
- Three PSIs have been generated from Q3. The PSI process is relatively new to LHCH, and ongoing training is needed to increase the numbers of staff that can lead on these PSIs, particularly from a clinician point of view. There are therefore several PSIs that will need to come back through the MRG for discussion and to identify learning.
- As of the 1<sup>st</sup> March the MRG has a new Chair. This may bring changes and new developments over time including the core membership of the MRG.