

Annual mortality and learning from deaths report 2024/25

**Public Board
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Presented for:	Assurance
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Previous Committees:	Mortality Improvement Group 10 February 2026 Quality Assurance Committee 19 February 2026

Link to Strategic Objective	Focus on care quality, effectiveness and patient experience
Link to Provider Capability Assessment	Quality of care
Link to CQC Well-led Statement	Learning, Improvement and Innovation
Regulatory Impact	N/A

Key points	Purpose
1. The purpose of this report is to provide annual assurance on the Trust's mortality processes and learning from deaths framework, including governance, compliance with review processes, key mortality indicators, themes and learning, and the improvement actions taken / planned.	Assurance
2. Following the review of corporate governance an annual report on the Trust Mortality Framework will be presented to the Board, in addition to the quarterly statutory Learning from Deaths reports. This report is based on data from 2024/25. Future reports will be presented annually at the December Board meeting. This timing reflects the time required to ensure robust national reporting and the completion of structured judgement reviews.	Information
3. The Mortality Improvement Group (MIG) provides the Trust-level strategic oversight of mortality and learning from deaths, reporting through the Clinical Effectiveness and Outcomes Group (CEOG) and to the Quality Assurance Committee (QAC).	Information
4. Mortality indicators: SHMI and HSMR moved between 'higher than expected' and 'as expected' bands during 2024/25; indicators continue to be monitored through MIG with coding and cohort work to understand drivers.	Assurance
5. Learning and improvement: key themes included recognition of severity of illness, acting on test results, care in the appropriate setting (including long stays in ED and transfers), and sepsis processes	Information

<u>Risk Appetite Framework</u>			
Level 1 Risk	Level 2 Risks	(Risk Appetite Scale)	Impact
Clinical Risk	Patient Safety & Outcomes Risk - We will provide high quality services to patients and manage risks that could limit the ability to achieve safe and effective care for our patients.	Minimal	Moving Towards

1. Summary

The purpose of the annual mortality report is to provide the Board with an overview of the Trust's mortality processes and to summarise activity relating to mortality and Learning from Deaths in 2024/25. It brings together the quarterly Learning from Deaths reports, the Mortality Improvement Group (MIG) annual report, and the mortality section from the Trust's Quality Account 2024/25, with a focus on:

- governance and process assurance,
- mortality indicators and trends
- learning and improvement actions.

Mortality reporting provides Board assurance that Learning from Deaths arrangements are effective and aligned with national expectations; that mortality surveillance is appropriately triangulated and acted upon; and that learning is translated into improvement, with any significant risks escalated through established governance routes where required.

We monitor improvement using national indicators and standards to benchmark Trust performance and outcomes against peers. We triangulate external and internal intelligence to understand trends and identify areas for improvement, including metrics such as the Hospital Standardised Mortality Ratio (HSMR) and the Summary Hospital-level Mortality Indicator (SHMI). We also consider relevant constitutional standards, with a focus on the safety of patients waiting for treatment and actions that support patients' health and wellbeing.

2. Monitoring and Understanding Mortality Outcomes

Leeds Teaching Hospitals Trust (LTHT) are committed to accurately monitoring and understanding its mortality outcomes; and to ensure any identified issues are effectively addressed to improve the quality and safety of patient care.

Reviewing mortality fulfils two of the five domains set out in the NHS Outcomes Framework:

- Preventing people from dying prematurely.
- Treating and caring for people in a safe environment and protecting them from avoidable harm.

LTHT uses the Hospital Standardised Mortality Ratio (HSMR) and Summary Hospital Level Mortality Indicator (SHMI) to compare mortality data nationally. Although these are not direct measures of the quality of care, benchmark outcome data help identify areas for investigation and potential improvement.

The Summary Hospital-level Mortality Indicator (SHMI) is published retrospectively and is based on validated, nationally collated data. This process involves the submission of data by providers, national-level quality assurance, case-mix adjustment, and statistical

validation before publication. As a result, there is an unavoidable time lag between the period of care and the release of SHMI results, meaning that the data reflects historical activity rather than real-time performance.

SHMI (Summary Hospital-level Mortality Indicator) and HSMR (Hospital Standardised Mortality Ratio) both measure if a trust's mortality rate is higher or lower than expected, but differ in scope: SHMI covers deaths in hospital and within 30 days of discharge for all diagnoses, while HSMR focuses on in-hospital deaths for a subset of 56 diagnoses.

The Trust uses a staged, proportionate approach to investigating mortality signals, broadly aligned to the “pyramid model of investigation” described by Mohammed et al. We begin with high-level surveillance of national and local indicators (including SHMI and HSMR) and consider whether observed variation may relate to data or methodological factors. Where additional assurance is required, we may undertake focused clinical coding review (including depth and consistency of coding and supporting documentation). If concerns persist, we then undertake case record review (e.g., Structured Judgement Review) and/or thematic review of relevant cohorts to identify patterns of care and learning. Where findings indicate potential patient safety concerns, cases are escalated through established governance routes to determine the appropriate response, which may include formal patient safety investigations in line with the Trust's incident response approach. This ensures escalation is based on progressively stronger evidence, moving from high-level signals to clinical detail and, where necessary, specific assurance about the safety and quality of care delivered.

National Guidance was published by the National Quality Board (NQB) in March 2017 entitled “A Framework for NHS Trusts and NHS Foundation Trusts on Identifying, Reporting, Investigating and Learning from Deaths in Care”; this guidance was presented to the Quality Assurance Committee in April 2017. In light of this guidance and the previous work of the Mortality Improvement Group, the Trust launched an updated Mortality Review Procedure in June 2017. This was reviewed in 2021 and an updated Mortality Review Policy was approved in January 2022 to include the role of the Medical Examiner, and a revised Structured Judgment Review management and monitoring process.

The Mortality and Learning from Deaths Policy was reviewed and endorsed in February 2025. This included changes to strengthen Structured Judgement Review as the agreed methodology for case note review, and to clarify sections on the Medical Examiner, Engagement with Family and Carers, Maternity and Neonatology reviews and the Children's Hospital Review process which differs to the reviews for adult deaths.

2.1 SHMI and HSMR

There are two national Trust-level mortality indicators: The Summary Hospital-level Mortality Indicator (SHMI) produced and published by NHS Digital and the Hospital Standardised Mortality Ratio (HSMR), published by Telstra Health UK (Dr Foster).

Both models compare the number of observed deaths at the Trust against a risk adjusted expected number of deaths. Neither SHMI nor HSMR adjusts for the severity of patient's illness.

During the 2024/25 financial year there were several changes to both SHMI and HSMR models:

- The SHMI includes all diagnosis groups, while the number of diagnosis groups included in the HSMR was reduced from 56 diagnosis groups to 41 diagnosis groups (which account for approximately 80% of in hospital deaths).
- The SHMI includes both in hospital deaths as well as deaths within 30 days of discharge while the HSMR only includes in-hospital deaths. The HSMR is adjusted for more factors than the SHMI, most significantly frailty (using Dr Foster Frailty index) and wider range of comorbidities.

Trust SHMI, HSMR, and SMR

Trust Level Mortality Oct-23 to Sep-24	Spells	Value	Observed Deaths	Expected Deaths	95% Confidence Interval
SHMI	102,080	1.122	4,040	3,600	0.8792 - 1.1373
HSMR	46,812	105.8	2,254	2130.2	101.5 - 110.3
SMR	170,399	106.1	2,942	2772.4	102.3 - 110.0

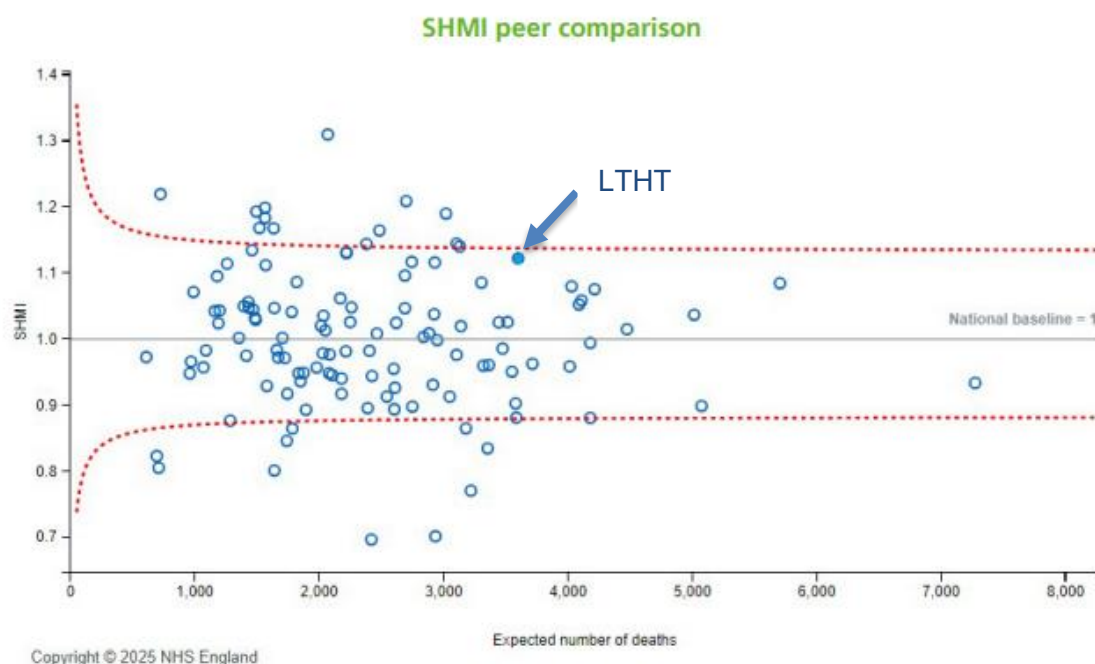
Table 1: Figures reported in the 2024/25 Quality Account.

The table above shows the Trust's latest published SHMI within 2024-25 as reported within the Quality Account, for the period October 2023 to September 2024, also shown is the HSMR and SMR for the same period. The Trust SHMI fell at this time within the 'as expected' banding. Dr Foster and SHMI Data were used to identify specialties and diagnosis groups with the highest number of "excess deaths". Data analysis was carried out using internal and external mortality and audit data to explore data and patient cohort related factors that could explain the apparent excess mortality and to gain assurance that there were no clinical concerns.

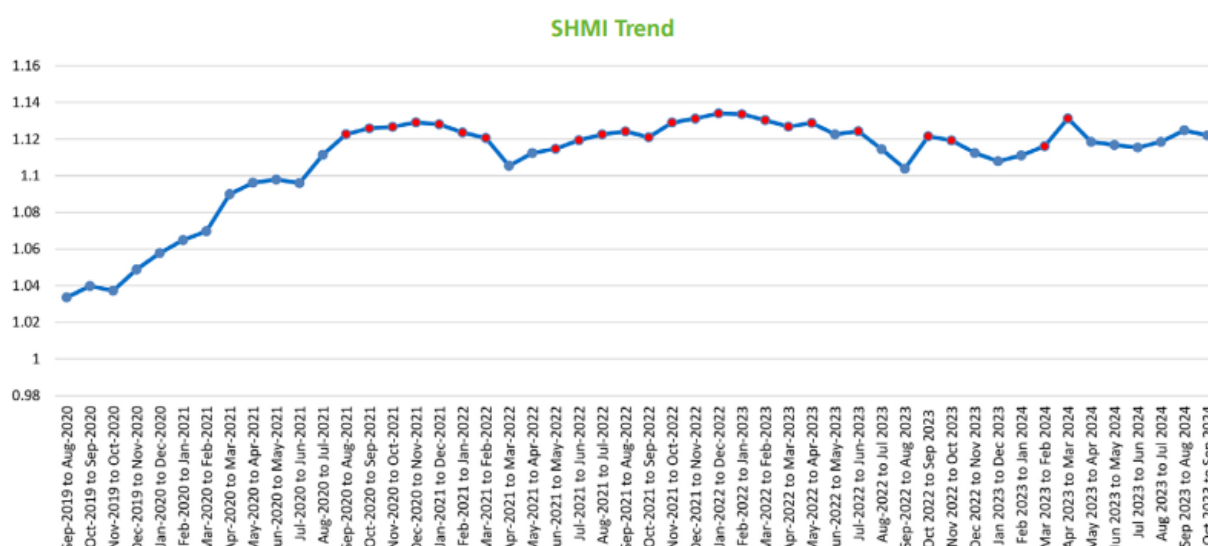
SHMI Indicator by rolling 12 month reporting period

Indicator	Reporting Period	Trust Rate	National Average	National Range
SHMI	Oct-22-Sep-23	112.15	1.00	0.68-1.23
	Nov-22-Oct-23	111.93	1.00	0.72-1.21
	Dec-22-Nov-23	111.25	1.00	0.72-1.26
	Jan-23-Dec-23	110.79	1.00	0.72-1.25
	Feb-23-Jan-24	111.11	1.00	0.70-1.25
	Mar-23-Feb-24	111.61	1.00	0.71-1.47
	Apr-23-Mar-24	113.13	1.00	0.71-1.32
	May-23-Apr-24	111.85	1.00	0.70-1.35
	Jun-23-May-24	111.68	1.00	0.69-1.32
	Jul-23-Jun-24	111.54	1.00	0.69-1.31
	Aug-23-Jul-24	111.85	1.00	0.70-1.32
	Sep-23-Aug-24	112.48	1.00	0.70-1.32
	Oct-23-Sep-24	112.2	1.00	0.70-1.31

Table 2: Figures reported in the 2024/25 Quality Account.



Graph 1: Figures Reported in the 2024/25 Quality Account



Graph 2: Figures Reported in the 2024/25 Quality Account

2.2 Comparison to 2023/24 Quality Account

Compared to 2023/24, the 2024/25 Quality Account reports SHMI in the 'as expected' banding (where it was previously reported on as higher than expected). The 2024/25 Quality Account also includes expanded explanation of national mortality metrics and methodology changes. The mortality screening tool was further updated in September 2024 to capture additional factors (including alcohol/substance abuse, severe mental health problems, and deaths during/within six weeks of end of pregnancy). Neonatal/perinatal mortality is also covered in more detail in 2024/25, including a planned external review in 2025/26.

2.3 Governance and reporting structure

The Mortality Improvement Group (MIG) is authorised by the Clinical Effectiveness and Outcomes Group (CEOG) to lead, support and report on mortality-related activities across the Trust. MIG acts as the strategic hospital mortality overview group, reviewing mortality data and learning from mortality reviews to support Clinical Service Units (CSUs) to improve care and outcomes.

MIG is chaired by the Associate Medical Director (Risk Management) and reports through CEOG to the Quality Assurance Committee (QAC). Mortality outlier alerts are reviewed at MIG; any safety issues for escalation are discussed through the Quality and Safety Assurance Group.

2.4 Learning from Deaths: Mortality review framework and process assurance

National guidance (NQB, March 2017) requires NHS trusts to identify, review and learn from deaths. The Trust's Mortality Review Procedure (June 2017) was reviewed in 2021, and an updated Mortality Review Policy was approved in January 2022 to include the role of the Medical Examiner and a revised Structured Judgement Review (SJR) management and monitoring process.

Identification of good practice and areas for improvement in care following a patient's death are an integral element of the mortality process within LTHT. Information from the Mortality Screening Tool and the Medical Examiner service are used to select cases for SJRs. The learning from SJRs and Patient Safety Investigations were reported in the Quarterly Learning From Deaths reports presented for assurance at Trust Board.

Trust wide learning from deaths activity includes:

- a) mortality screening of eligible inpatient deaths using the Trust screening tool;
- b) structured judgement reviews (SJRs) and other locally agreed clinical review methods;
- c) escalation of deaths through patient safety incident processes where concerns are identified; and
- d) thematic review and follow-up through CSU governance and Trust-wide oversight via MIG.

Aims for 2025/26:

- In 2025/26 the Mortality Improvement Group will continue to monitor mortality trends across the Trust and explore areas of interest.
- Additionally, further opportunities to thematically analyse data from SJRs and national audits will be explored

2.5 The Medical Examiner

The statutory medical examiner system in England and Wales provides independent scrutiny of all deaths and puts the bereaved family central to the process, offering them a voice and support at what is often a very difficult time. All deaths in any health setting that are not investigated by a coroner will be reviewed by the medical examiner.

The Medical Examiner office is delivered by the Trust, staffed by a team of medical examiners (ME), supported by medical examiner officers (MEO).

Medical examiners are senior medical doctors who are contracted for a number of sessions a week to provide independent scrutiny of the causes of death, outside their usual clinical duties. They are trained in the legal and clinical elements of death certification processes.

The role of these offices is to examine deaths to:

- agree the proposed cause of death and the overall accuracy of the medical certificate of cause of death (MCCD) with the doctor completing it
- discuss the cause of death with bereaved people and establish if they have questions or any concerns with care before death
- act as a medical advice resource for the local coroner
- identify cases for further review under local mortality arrangements and contribute to other clinical governance processes

Concerns/themes which are related to care and treatment will be shared with CSU's directly, or via PALS. The Medical Examiner may at times request a further review of a case through local Governance teams or escalation to the Quality Governance team using the learning from deaths referral pathway where significant issues are identified by the medical examiner, or the family. Where a case is escalated for review the Quality Team will action these escalations by requesting an SJR or if the escalation identifies a potential patient safety incident through discussion with the Risk Team to review and advise on most appropriate type of review or investigation required. These processes ensure that themes and concerns about care are raised and investigated appropriately.

2.6 Engagement with Families and Carers

All deaths will be reviewed to identify whether the family or carer has raised a concern and if this is the case it will trigger a Structured Judgment Review (SJR). In addition, from the June 2019 engagement was strengthened through implementing a revise engagement process, adapted from 'Learning from Deaths Guidance for NHS Trusts on working with Bereaved Families and Carers July 2018':

<https://www.england.nhs.uk/publication/learning-from-deaths-guidance-for-nhs-trusts-on-working-with-bereaved-families-and-carers/>

All families/carers, during their interaction with the medical examiner discuss the Medical Certificate of Cause of Death (MCCD), they are asked if they have any questions or concerns relating to the cause of death and care of the person who has died.

We do routinely direct families/carers to our PALS service if they do not wish for the medical examiner to raise concerns on their behalf.

If a complaint is raised regarding the care of a person who has died, CSUs are alerted as part of the complaints process. CSUs will then consider if a structured judgment review (SJR) is indicated.

If a review identifies concerns that require formal incident investigation, the Trust will communicate with families/carers to ensure the principles of the duty of candour are followed.

2.7 Neonatal Mortality

The Trust review and monitor neonatal mortality rates both internally and through the Regional Neonatal Operation Delivery Network. The latest published MBRRACE report from the 2024/25 period (February 2025) on 2023 data on neonatal mortality demonstrates that in 2023 the mortality rate in Leeds Neonatal service was >5% higher than average when compared to similar units at 5.01/1000 live births. This remains even after the removal of infants who have a congenital anomaly at 2.05/1000 live births.

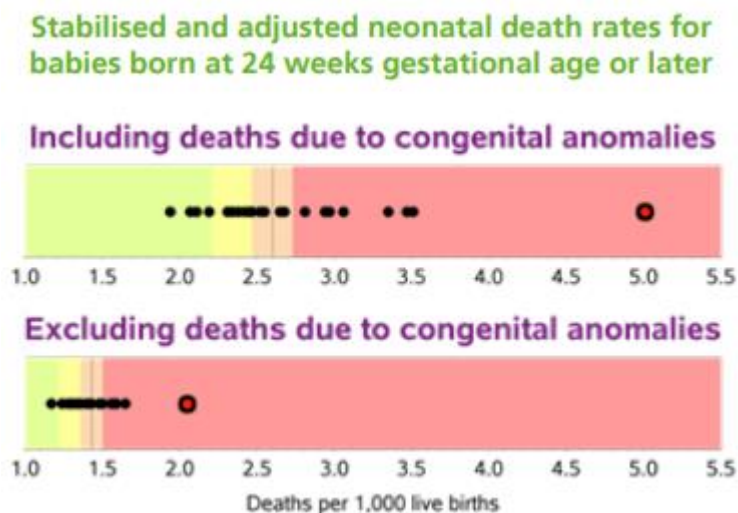


Figure 1: As reported in the 2024/25 Quality Account

The Neonatal Services has undertaken a proactive internal review of the 2023 data to ensure the Trust is responsive to concerns and any changes in population. The review demonstrated that a third of neonatal deaths related to complex cardiac diagnosis, half of all neonatal deaths had been referred into the fetal medicine service reflecting the complexities of the pregnancies referred to the Trust.

2.8 Perinatal Mortality Review Tool

The Trust complete a Perinatal Mortality Review Tool (PMRT) for the care received by babies who died in pregnancy from 22 weeks' gestation onwards or died within 28 days of being born (perinatal deaths). The aim of the PMRT programme is to support standardised perinatal mortality reviews across NHS maternity and neonatal units to review care, identify learning, and improvement actions to improve future care.

2.9 Maternal Deaths

Maternal deaths are managed through a formal review and investigation pathway. In line with the Mortality Review Policy, each maternal death is recorded as an incident (DATIX) and undergoes Structured Judgement Review (SJR) and incident review. The process is intended to provide robust assurance, identify learning and required improvement actions, and ensure appropriate support and communication for families and staff.

2.10 Child Deaths (under 18)

Child deaths are reviewed through the Leeds Children's Hospital mortality review process. This pathway ensures all child deaths are recorded and reviewed within specialty governance, with learning captured and actions followed up. The adult mortality screening tool and SJR methodology are not used for children; instead, cases are reviewed through

the Child Death Review Meeting process with outputs submitted through the statutory child death review arrangements, including reporting to Child Death Overview Panel (CDOP) and the National Child Mortality Database.

2.11 Mortality indicators and trends

The Trust monitors national mortality indicators including the Summary Hospital-level Mortality Indicator (SHMI) and Hospital Standardised Mortality Ratio (HSMR). These are reviewed through MIG alongside local intelligence (e.g., Dr Foster, Model Hospital, coding data) and specialty-level deep dives.

Quarterly report	SHMI (publication period / banding)	HSMR (publication period / banding)	Commentary
Q1 (Aug 2024)	1.1313 (Apr 23-Mar 24) higher than expected	109.2 (Jun 23-May 24) higher than expected	Both indicators above expected range and monitored.
Q2 (Nov 2024)	1.1154 (Jul 23-Jun 24) as expected	105.2 (Sep 23-Aug 24) higher than expected	SHMI improved into expected band; HSMR remained above expected.
Q3 (Mar 2025)	1.1211 (Nov 23-Oct 24) as expected	108.6 (Jan 24-Dec 24) banding not stated in summary	Indicators stable; continued cohort and coding work.
Q4 (Jul 2025)	1.1371 (Mar 24-Feb 25) as expected	109.3 (May 24-Mar 25) as expected	Both indices as expected; LGI returned to expected range in Q4 narrative.

2.12 Learning, improvement and assurance themes

This section summarises the key learning and improvement themes identified through mortality screening, Structured Judgement Reviews (SJRs), Medical Examiner (ME) escalations, and deaths escalated via patient safety incident processes, and describes how this learning is translated into improvement and assurance.

Trends in relation to good practice	
	Communication & Collaboration Good multi-disciplinary team approach was a frequent theme highlighted, as was good communication and engagement with families and patients.
	Clinical Management Themes of good practice in clinical management were identified including early recognition, prompt advice from other specialties, assessments, and senior review.
	Early Recognition and End of Life Care Multiple specialties continued to highlight good practices relating to end of life care including early recognition of a dying patient, involvement of the palliative care team, exploring patients' wishes and providing good bereavement support and compassionate care to families and patients.
Trends in relation to areas for improvement	
	Outlying patients Several specialties highlighted issues relating to patients residing in outlying areas and the importance of transferring the patient to the suitable bed space as soon as appropriate.
	Documentation Several specialties highlighted issues relating to accessing and locating ED and YAS notes.

Table 3: As Reported in the Quality Account 2024/25

2.12a Summary of escalations and reviews

Across 2024/25, deaths were escalated for further review through the Trust's patient safety incident escalation processes and the Medical Examiner service. In Q1 there were no deaths identified as possibly resulting from problems in healthcare via incident escalation; in Q2, five deaths were escalated; in Q3, seven; and in Q4, four (total 16 across the year). The Medical Examiner service escalated 11 cases in Q1, eight in Q2, 19 in Q3 and 13 in Q4 (total 51).

2.12b Cross-cutting learning themes (themes for improvement)

Cross-cutting learning themes identified through low-scoring SJRs, cohort reviews and CSU returns included:

- timely recognition of severity of illness and escalation of care;
- acting on blood results and investigations in a timely way;
- care delivered in an appropriate setting (including extended stays in ED and complex transfers);
- and sepsis processes (documentation of suspected sepsis, cultures, fluid balance, antibiotics and senior review).

Further themes raised during the year included missed or delayed medicines (particularly antibiotics and anticoagulants), documentation and access to ED and ambulance notes, and long waits for inpatient beds in ED due to system pressure.

2.12c Good practice themes

Across CSU learning returns, repeated themes of good practice included:

- strong multi-disciplinary working and communication,
- proactive engagement with families,
- early senior review,
- and good end-of-life care including timely recognition of dying, palliative care involvement, and compassionate bereavement support.

2.12d Mortality work programme and deep dives

The MIG work programme included quarterly specialty and cohort presentations to triangulate national metrics (SHMI/HSMR/Dr Foster) with local review findings and identify targeted actions. Topics in 2024/25 included: Children's Hospital mortality review processes and paediatric sepsis, nephrology and urology (Q1); learning disability and autism (including LeDeR reporting and review of advance care planning and reasonable adjustments) (Q2); sepsis, acute kidney injury (AKI) and fractured neck of femur/hip fracture mortality (Q3); and neonatal mortality, cardiac/circulatory congenital anomalies, and updates to MIG terms of reference and coding KPIs (Q4).

2.12e How learning is converted to improvement and assurance

Learning is reviewed and owned at specialty mortality review meetings and CSU Quality Assurance Groups, with escalation of significant issues through patient safety processes where required. Themes and assurance are consolidated through MIG and reported to Quality Assurance Committee. Actions are tracked through CSU governance structures and relevant Trust programmes (e.g., sepsis improvement, medicines safety, patient flow), and progress is reflected in the improvement actions section and 2025/26 workplan.

Examples of improvement work reported include quality improvement projects arising from renal mortality reviews (e.g. protocol updates, digital prescriptions, transfer policy updates) and directed improvement work with services following cohort reviews (e.g. sepsis teaching and QI projects, coding review).

2.13 Key Achievements in 2024/25

In keeping with the Annual Commitments for 2024/25, the organisation worked to use existing digital systems to strengthen understanding of Trust mortality data and to further embed the Mortality Review Process. Following the launch of the online Structured Judgement Review (SJR) tool in 2023/24, in 2024/25 outputs from this system were used to support end-of-life care review and thematic analysis to identify areas for improvement. Internal and external data sources were also used to explore mortality in specific patient cohorts (including learning disability/autism and paediatric patients).

The Mortality Screening Tool (PPM+) was updated in September 2024 to capture additional factors including alcohol/substance misuse, severe mental health problems, and deaths during and within six weeks of the end of pregnancy.

2.14 Key priorities and early updates for 2025/26

In 2025/26, MIG will continue to monitor mortality trends and explore areas of interest. The group intends to build further thematic analysis using SJR and national audit data, and to

continue cohort work (e.g., learning disability/autism and paediatric patients) as outlined in the MIG work plan.

In 2025/26 we have ended the contract with Dr Foster and Telstra Health and are in the process of onboarding a new system called HED; Healthcare Evaluation Data (HED) which is an online benchmarking solution developed by University Hospitals Birmingham NHS Foundation Trust.

In addition to this, we have had an internal audit carried out by Price Waterhouse Cooper (PWC). The draft report from this audit has been received and demonstrates areas for improvement related to the training available for structured judgement reviews, standardisation across the CSUs regarding both the quality of SJRs and the creation and follow up of action plans. These areas for improvement will form the basis of our improvement plans for 2026/27.

3. Quality and Performance Implications

This assurance report identifies key themes and actions arising from mortality reviews and highlights performance considerations linked to completion and quality assurance of reviews and implementation of learning across services.

Key performance implications relate to the ongoing capacity required across specialties to complete mortality screening and Structured Judgement Reviews within expected timescales, maintain consistency and quality assurance of reviews, and track and close improvement actions. Where there is variation in completion or timeliness across services, this presents a risk to the timely identification of learning and subsequent improvement; this is mitigated through Mortality Improvement Group oversight and escalation through established quality governance routes.

4. Financial Implications

There are no financial proposals outlined within this report. The cost to replace Dr Foster with HED was comparable.

5. Risk

Overall, the Trust continued to operate within the risk appetite statements referenced in the quarterly and annual MIG reports. Key operational issues during the year included the need to sustain high compliance with mortality screening and to address system/process issues impacting completion (e.g., the technical issue affecting screening completion reported in February 2025).

6. Communication and Involvement

The content of this report was agreed with members of the Mortality Improvement Project Group, including colleagues from Coding, the Quality Governance Team, and Informatics.

Various sections of the report have been agreed and endorsed by other groups and committees when originally reported on as part of the Quality Account, the quarterly learning from deaths reports, and the annual Mortality Improvement Group report.

7. Improving Health Equity

The Mortality Review Policy and Learning from Deaths process support a comprehensive approach to ensuring safe and effective care, particularly for vulnerable groups. Learning disability and autism mortality was a specific focus in 2024/25, with reported evidence that adult patients with learning disability die at a younger average age than the general population and that LeDeR reporting occurs in real time.

8. Publication Under Freedom of Information Act

This paper has been made available under the Freedom of Information Act 2000.

9. Recommendation

The Board is asked to receive the annual assurance on the Trust's learning from deaths framework, including governance, compliance with review processes, key mortality indicators, themes and learning, and the improvement actions taken / planned.

10. Supporting Information

None