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Sheffield Teaching Hospitals
NHS Foundation Trust

Executive Summary
Report to the Board of Directors Meeting
Being Held on 23rd July 2024

Subject	Learning from Deaths Report – Q3 2023/24
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Status[1]	A*

PURPOSE OF THE REPORT

This is the quarterly assurance report to the Board of Directors on the deaths of patients under the care of Sheffield Teaching Hospitals NHS Foundation Trust (STHFT) as required by the Learning from Deaths Guidance dated March 2017 covering Q3 of 2023/24 (1st October – 31st December 2023).

KEY POINTS

This is predominantly a statistical report on hospital mortality; however, we are mindful that every death included in these figures is an individual patient.

1. There have been 2,842 deaths at the Trust for the 12-month period to the end of December 2023 (end of Q3), showing a pattern of common cause variation for total deaths and mortality rate. This pattern has continued to May 2024.
2. When compared with national benchmarks, overall mortality for March 2023 to February 2024 (latest) was lower, albeit the non-elective mortality was higher and is under continual surveillance and investigation.
3. The Trust SHMI remains stable and in the 'as expected' range for February 2023 to January 2024 (latest). A SHMI value and banding is calculated for a subset of 10 diagnosis groups, of which all were 'as expected' or 'lower than expected'.
4. The 12-month rolling Hospital Standardised Mortality Ratio (HSMR) from March 2023 to February 2024 was 115.52 (110.68-120.53) and banded statistically 'higher than expected'. When Palliative Care adjustment is excluded, this falls to 104.02 and is 'as expected,' suggesting variability in coding across the country. The HSMR Working Group, continues to investigate underlying data issues impacting the HSMR model.
5. The Q3 mortality data at STHFT, reviewed as part of Learning from Deaths (1st October – 31st December 2023) shows:

Total no. adult deaths at STHFT:	680
• Total no. adult deaths subject to Structured Judgment Review (SJR):	50
• Of the deaths subject to SJR in Q3, the number of deaths judged more likely than not to be due to a problem in care:	0
• Total number of deaths judged more likely than not to be due to a problem in care, following completion of a serious incident investigation during Q3 and reviewed by the Serious Incident Group in Q3:	1

6. Approximately 7% of deaths in Q3 of 2023/24 were referred by the ME for SJR of which, 42% have been completed (21/50). Two outcomes scored less than 3.
7. Seventy-one (71) % of SJR outcomes from the 21 cases completed in Q3 showed 'excellent' or 'good' care overall.
8. Learning points/actions taken from the SJRs reviewed by the Mortality Governance Group (MGG) with an overall care score of two or three were around escalation of the deteriorating patient, consent, skin care and nutritional support.
9. The mortality outlier status from the National Hip Fracture Data NHFD national audit has returned to 'as expected' in Q3. Arrangements for a formal BOA review are being made.
10. Fracture of neck of femur is in the 'as expected' range for both SHMI and HSMR.

IMPLICATIONS[2]

Aim of the STHFT Corporate Strategy		✓ Tick as appropriate
1	Deliver the Best Clinical Outcomes	✓
2	Provide Patient Centred Services	✓
3	Employ Caring and Cared for Staff	
4	Spend Public Money Wisely	✓
5	Deliver Excellent Research, Education & Innovation	
6	Create a Sustainable Organisation	

RECOMMENDATIONS

The Board of Directors are asked to approve the content of the report.

APPROVAL PROCESS

Meeting	Date	Approved Y/N
Trust Executive Group	10 July 2024	Y
Quality Committee	15 July 2024	Y
Trust Board of Directors	23 July 2024	

n.b., Report noted at Quality and Safety Executive Committee 01 July 2024.

[1]Status: A = Approval, A* = Approval & Requiring Board Approval, D = Debate, N = Note

[2] Against the six aims of the STHFT Corporate Strategy 'Making a Difference – The next Chapter 2022-27'

This is predominantly a statistical report on hospital mortality. However, we are mindful that every death included in these figures represents an individual with a unique story.

1. Deaths by month – Crude mortality

1.1. There were 2842 deaths in Sheffield Teaching Hospitals Foundation Trust (STHFT) in the 12-months period to the end of December 2023 (the end of Q3, of which 5% (143) were in A and E and 95% (2699) were inpatient deaths *(Source: Information Services Report 'Deaths in Hospital').*

1.2. Figure 1 shows deaths per month since July 2021. The monthly crude death rate for all STHFT deaths (inpatient and ED) from June 2021 to May 2024 is shown in Figure 2. Both crude mortality and crude mortality rate are in a pattern of common cause variation for the 12-month period.

1.3. The peak in December 2022 shows mortality in this period was higher than any month since June 2021. The January 2023 Office for National Statistics publication reported that December 2022 deaths registered in England were 13.5% above the December five-year average *(2016-2019 & 2021).*

Figure 1

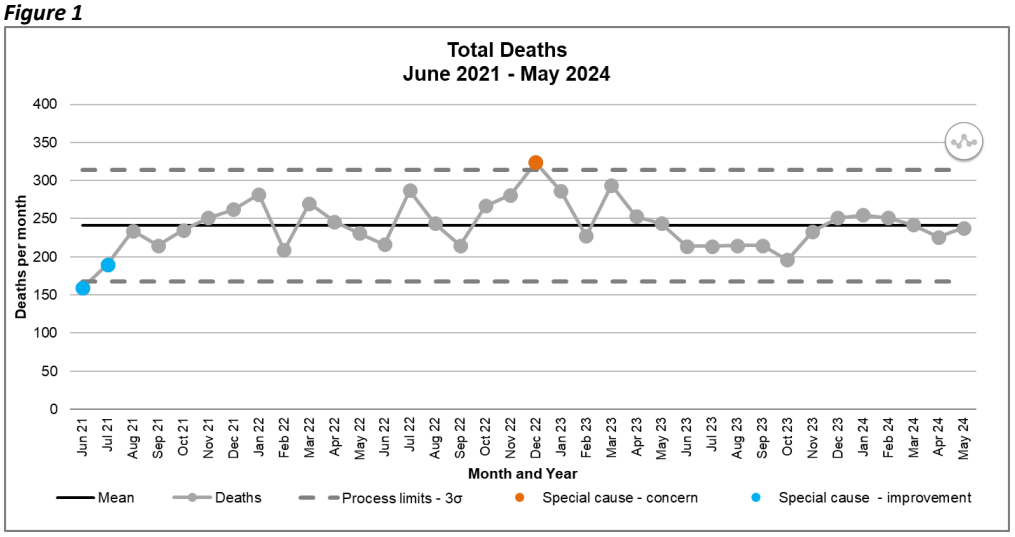
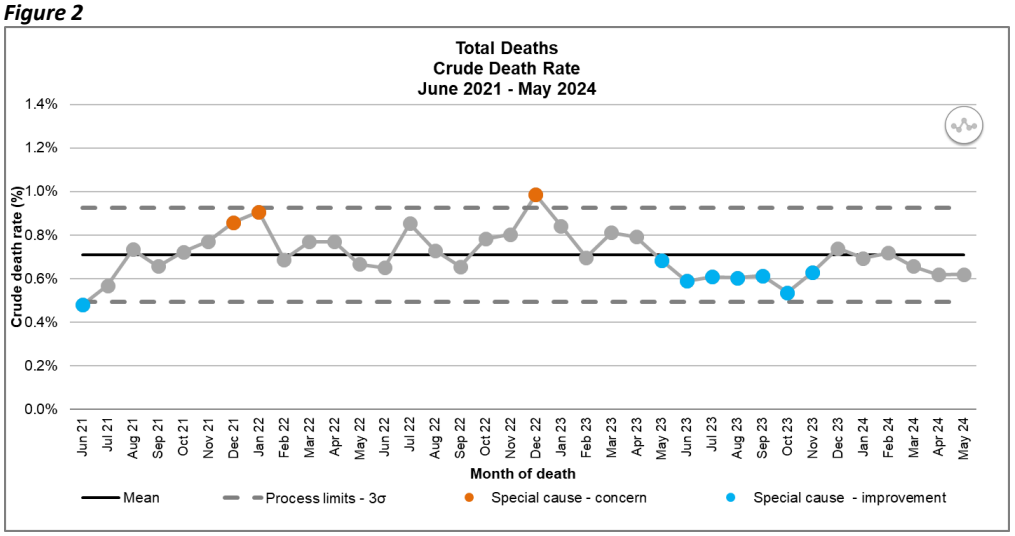


Figure 2



***Source**: Information Services Report 'Deaths in Hospital' (accessed 04/06/2024 & excluding Neonatology and Well babies specialities).*

1.4. From March 2023 to February 2024, the crude mortality rate for all STHFT admissions was 1.1% compared with 1.4% for all acute, non-specialist trusts *(Source: Healthcare Evaluation Data (HED)).*

1.5. When split by admission method, the crude mortality was 0.1% for elective admissions and 2.8% for non-elective admissions, compared with 0.1% and 2.6% respectively nationally *(Source: HED).* The Trust was one of 12 within the regional peer group with a non-elective mortality greater than the national average and is ranked 10 out of the 20 regional acute non-specialist Trusts

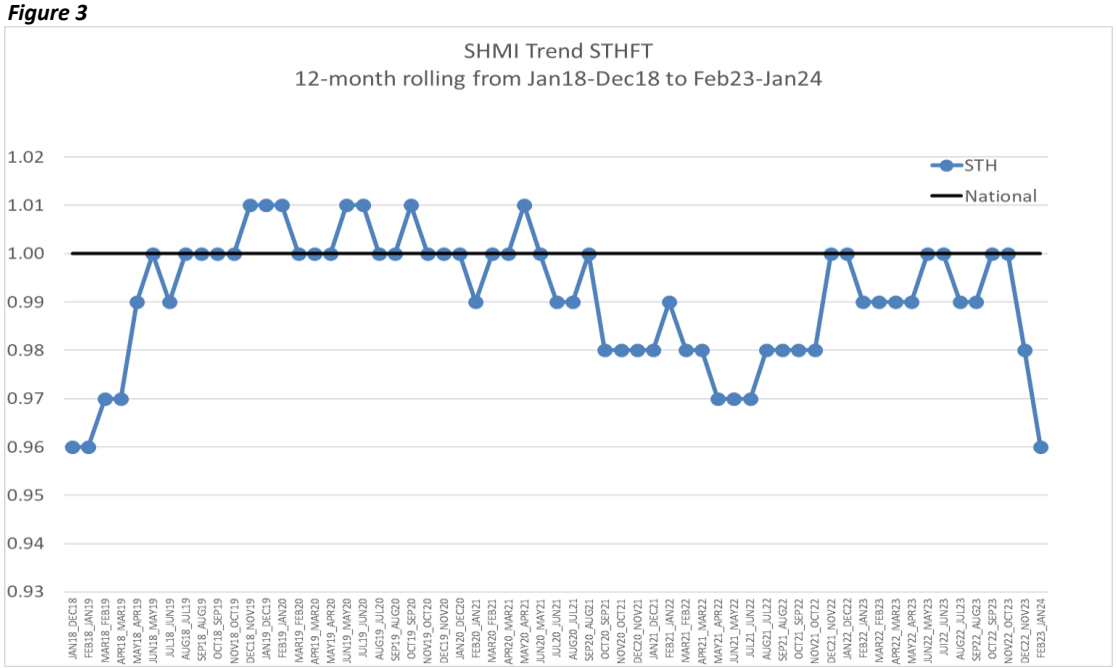
2. Summary Hospital-level Mortality Indicator (SHMI) February 2023 to January 2024

2.1. The Trust SHMI value for the period February 2023 to January 2024 reduced to **0.96,** banded "as expected', with an observed number of deaths of 3,605 compared with 3,740 expected deaths (COVID-19 activity is now included in the SHMI if the discharge date is on or after 1 September 2021 because the death rate for COVID19 stabilized from mid-2021 compared to the initial stages of the pandemic).

2.2. From May 2024 the site level breakdown will only be calculated for a subset of sites due to concerns from users around whether SHMI values are calculated on a like for like basis across all sites. A site level SHMI will not be calculated if the site has fewer than 1,000 spells in the 12-month reporting period or it is deemed a specialist site (as defined by SHMI). Site level SHMI shows Northern General Hospital (1.06) in the 'as expected banding.' NHS Digital have not calculated a site level SHMI for either the Royal Hallamshire or Weston Park Hospital for the period February 2023 to January 2024.

2.3. Figure 3 depicts the SHMI trend since 2018. The SHMI has remained stable between 0.96 and 1.00 for the past 32 months.

Figure 3



Source: NHS England

2.4. A greater proportion of STHFT SHMI deaths occur in hospital (75%) compared with the national average of 70%. 25% of deaths occurred outside hospital within 30 days of discharge. This may indicate patients are staying in hospital longer than is the case in some other organisations.

2.5. SHMI routinely reports the percentage patient deaths with palliative care coding as a contextual indicator to assist with interpretation of data. The STHFT percentage of deaths with palliative care coding is 36% - lower than the national average of 43% (national range 16% to 67%). Work has commenced to look at how some other Trusts code palliative care for assurance on the

methodology used in STHT. The Trust Coding Manager reviews palliative care coding for accuracy and has implemented a business-as-usual process that ensures that all activity is captured by validating clinical coding against the Palliative Care Services own contact report and an Information Services User Report monthly. The new EPR will provide an opportunity for re-coding of input from the service that is visible to the clinical coders.

2.6. For a subset of 10 diagnosis groups a SHMI value and banding is calculated by NHS England. Nine are 'as expected' and Secondary malignancies is 'lower than expected' for STHFT.

2.7. Sheffield has a higher than national average percentage of provider spells in the deprivation quintile 1 (most deprived, 40.4% vs 23.3%) and lower representation in groups 2 to 5 (5 being least deprived); this will impact mortality rates because ONS data show that people are at greater risk of death at any age in more socioeconomically deprived areas. 38% of deaths at STHFT are from deprivation quintile 1 compared with a national average of 21%. The SHMI methodology does not make an adjustment for deprivation.

2.8. Using the most recently available HES data release, a preview of the value of SHMI for March 2023 to February 2024 is available and stands at 0.96 and 'as expected' *Source: Healthcare Evaluation Data (HED)*. The NHS England data release for this time period is scheduled for 11th July 2024.

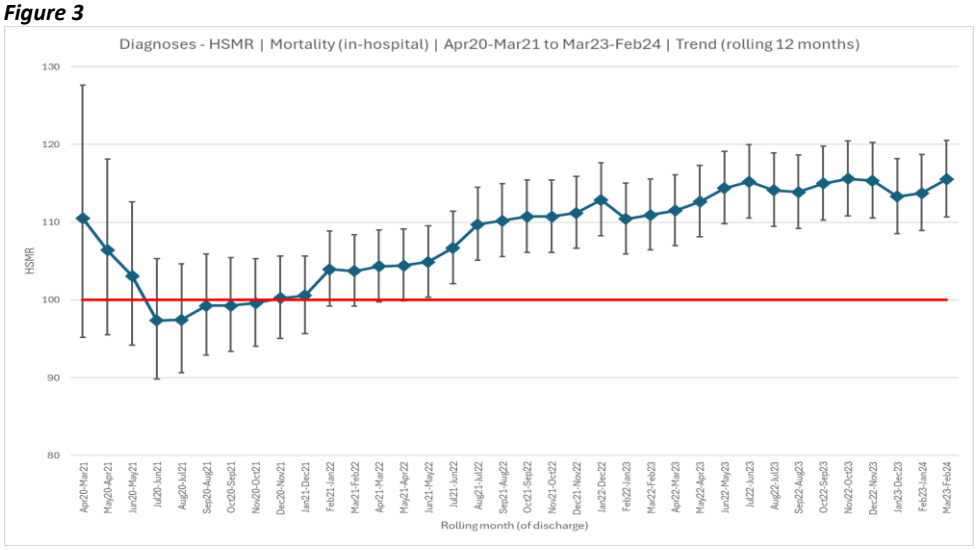
3. Hospital Standardised Mortality Ratio (HSMR) 1 March 2023 to 29 February 2024

3.1. The 12-month rolling HSMR from 1 March 2023 to 29 February 2024 was **115.52 (110.68-120.53)** and banded statistically 'higher than expected' (benchmark: March 2024). The HSMR value has been lagged by one month because less than 80% of the March data was coded at the flex point.

3.2. Split by admission method, the non-elective mortality rate for the HSMR activity is 5.8% compared with a national average of 5.6% and the elective mortality rate for the HSMR activity is consistent with the national average of 0.1%. This reflects the pattern in crude mortality as described in section 1.5.

3.3. The HSMR trend for the past 36 months is shown in Figure 3. Over the past 12 data points the HSMR has shown a relatively stable trend, varying between 112 and 115.

Figure 3



Source: HED

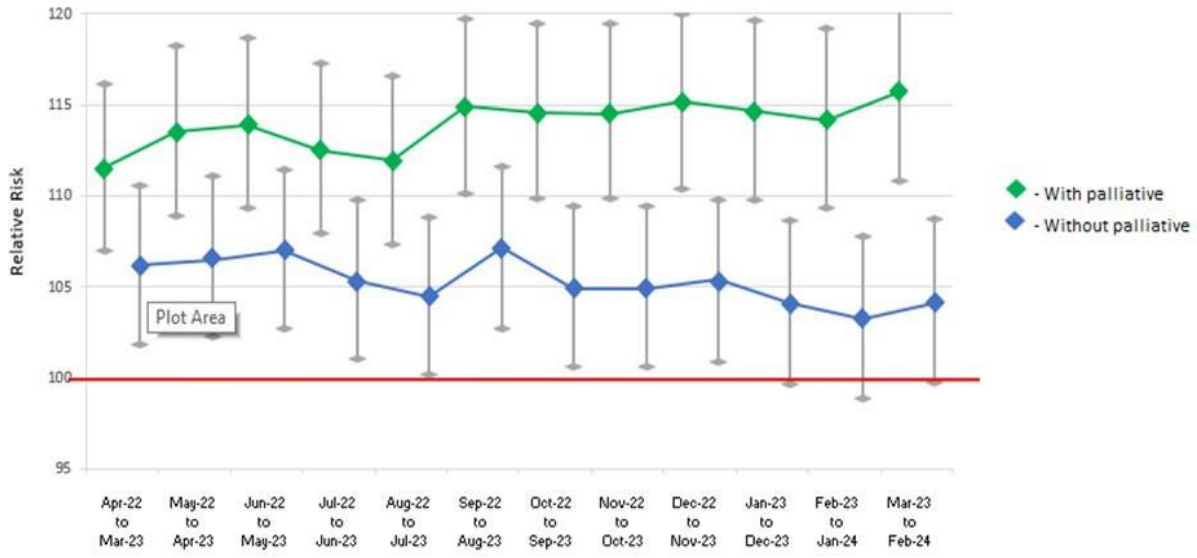
3.4. If split by 10-year age bands, the alerting groups for the HSMR basket (all admissions) are 75-84 years old (661 deaths, 577.6 were expected) and 85+ (679 deaths, 594.2 were expected).

3.5. HSMR includes Covid-19 codes. The HSMR excluding the secondary COVID-19 codes for all trusts reduces to 114.1 but is still statistically 'higher than expected'.

3.6. When palliative care coding is removed, HED reports the HSMR value for March 2023 – February 2024 as 104.02 (as expected) which suggests there could be coding practices with palliative care codes which are different in other Trusts. Figure 4 shows the trend lines are becoming more divergent and work is underway by the Data Quality Manager to benchmark STHFT HSMR trends with and without palliative care adjustment against those of peer trusts.

SHMI does not adjust for palliative care.

Figure 4



3.7. The Clinical Coding Department is working with external agencies to clear the coding backlog. Although the aim is to have 80% of coding completed by the flex position (two weeks post month end), the priority is to ensure coding is complete ahead of freeze (six weeks post month end). We are currently managing about 70% complete at flex. Four weeks post month end, 90-95% of coding is complete with 100% completion ahead of the freeze deadline (which is six to seven weeks post month end).

3.8. A process is in place to inform all directorates involved in the patient pathway about alerting diagnosis groups, the results of the classification and coding reviews completed centrally and the responsibility to engage in any associated clinical reviews for reporting to the Mortality Governance Group.

4. Data from National Audits (Outliers)

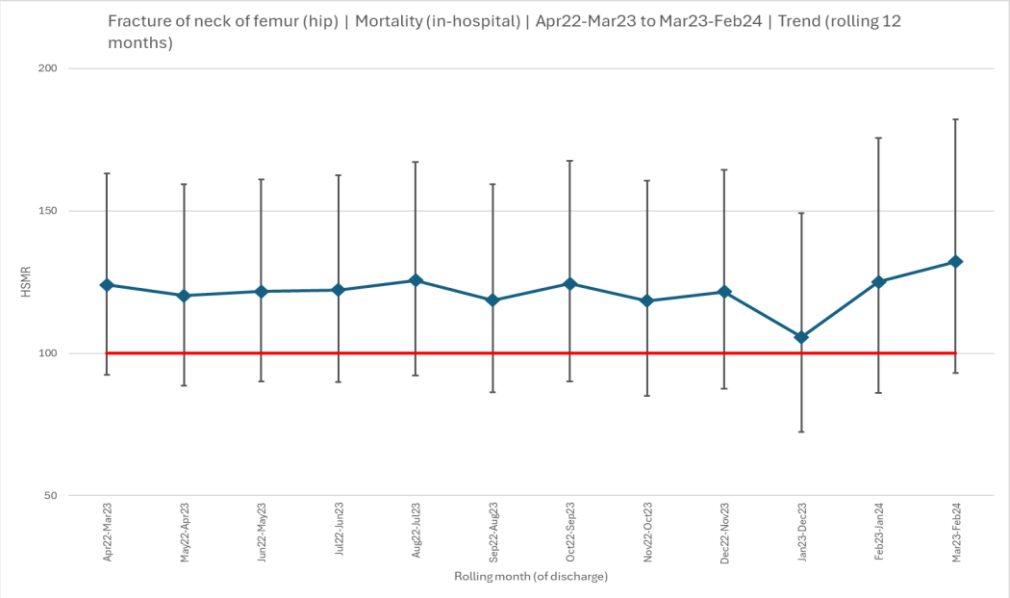
This section reports on national clinical audits where the Trust has been notified of mortality outlier status.

4.1. **National Hip Fracture Database** - In April 2024, the latest case mix-adjusted 30-day mortality was published on the NHFD website showing figures for the year up to the final quarter of 2023 (October to December) showed that the Trust was now below the upper control limits (both 95% and 99.8%) and no longer in outlier status. This aligns with SHMI and HSMR metrics for the same period.

4.2. However, as the Trust had been viewed as an outlier prior to the latest publication and had received and acknowledged formal notification of this outcome, a further review by the British Orthopaedic Association (BOA) is planned.

4.3. The HSMR for Fracture of neck of femur (#NoF) reports on a more recent time frame to the end of February 2024 with a value of 132.2 (93.1-182.2) and banded 'as expected' (figure 5). Without palliative care adjustment the HSMR for this period is lower at 113.5.

Figure 5



Source: HED

4.4. The SHMI reports on a more recent time frame to NHFD (February 2023 to January 2024), and this metric is 'as expected' at 0.98.

4.5. Twelve inpatient #NoF deaths from December 2022 have been subject to Structured Judgement Review with the overall scores reported in the Q2 report. The outcome of one of the two cases scoring two remains under review by the Mortality Governance Group, with additions to the action plan requested.

5. Mortality Case Review Process – Structured Judgement Review (SJR)

5.1. The annual / quarterly / monthly SJR data breakdown is represented in figure 8. *Source: Datix PALS*

Figure 8

Structured Judgement Review (SJR) Annual Data

= SJR score 3-5 **= SJR score 1-2** **= SJR Rejected** **=SJR not yet complete**

JANUARY 2023 **6%** (17/286) Deaths referred for SJR	**FEBRUARY 2023** **6%** (14/227) Deaths referred for SJR	**MARCH 2023** **6%** (17*/294) Deaths referred for SJR
APRIL 2023 **4%** (9/253) Deaths referred for SJR	**MAY 2023** **6%** (15/244) Deaths referred for SJR	**JUNE 2023** **8%** (17/214) Deaths referred for SJR
JULY 2023 **7%** (14/214) Deaths referred for SJR	**AUGUST 2023** **7%** (16/215) Deaths referred for SJR	**SEPTEMBER 2023** **4%** (8/215) Deaths referred for SJR
OCTOBER 2023 **11%** (21/196) Deaths referred for SJR	**NOVEMBER 2023** **5%** (11/233) Deaths referred for SJR	**DECEMBER 2023** **7%** (18/251) Deaths referred for SJR

Total 2,842 deaths: 177 referred for SJR with 6 rejected and 135/171 SJRs completed

*7 deaths where the patient had sustained a fractured neck of femur have been added to the March case reviews as part of ongoing response to HSMR and NHFD data

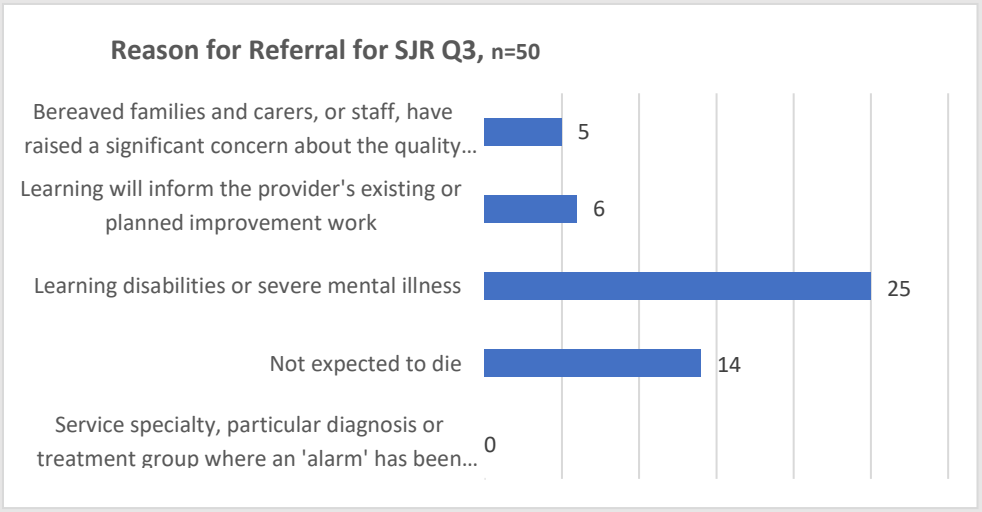
Data correct as of 14th June 2024

5.2. Structured Judgement Review (SJR) Quarterly Data

Between 1st October 2023 and 30th December 2023 (Q3):

7% (50/680) hospital deaths were referred for SJR	1 case was rejected as a Serious Incident investigation had already been initiated	**42% (21/50)** of these cases are complete

Figure 9



50% cases were referred because of learning disabilities or severe mental illness

Final Overall Scores for Completed SJRs		
1 Very Poor	0%	0/50
2 Poor	4%	2/50
3 Adequate	8%	4/50
4 Good	24%	12/50
5 Excellent	6%	3/50

71 percent of the SJRs completed for inpatient deaths (15/21) in Q3 have scored good or excellent.

First 24 hours
n=21

Ongoing Care
n=18

End of Life Care
n=16

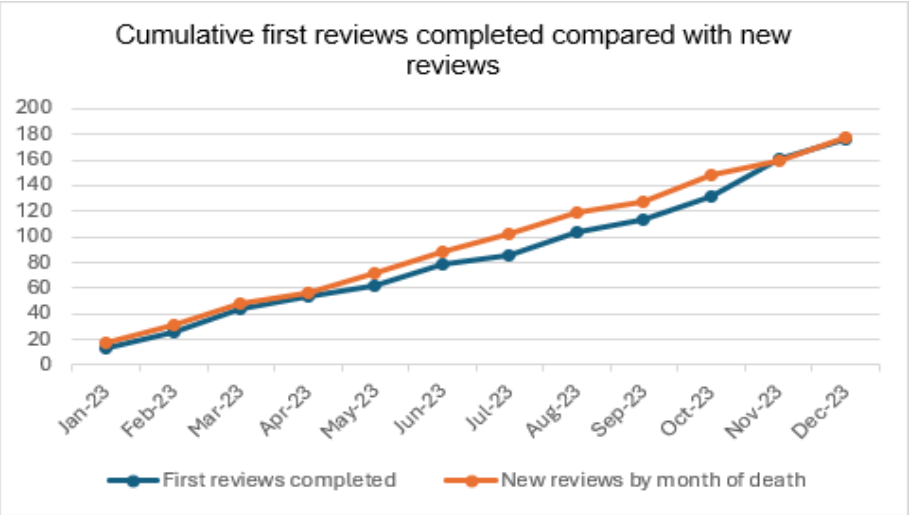
= Very poor care =Poor care =Adequate care = Good care =Excellent care

- In seven cases 'care during a procedure' was applicable with one case rated as adequate, three good and one excellent. No score was given in two cases.
- In six cases 'perioperative care' was applicable with five cases rated as good and one as excellent.

5.3. 36 SJRs from 2023 still require a first review, including 28 from Q3.

5.4. Although still significant, the SJR backlog is slowly reducing. In the 12-month period from 1st January 2023 to 31st December 2023, first reviews kept pace with new SJRs added for deaths in that period plus additions due to alert investigation (fig 10). Furthermore, 14 second reviews were completed.

Figure 10



5.5. The remaining backlog is being tackled with a two-pronged approach: -

- Review of the appropriateness of cases being referred to ensure that SJR is the best review process for a particular death (for example if an issue identified by a Medical Examiner occurred before the final admission, the SJR will not look at this). A guide for Medical Examiners is being created.
- Three new reviewers have been operational since autumn 2023 bringing the total number of active reviewers to eight. We offer the opportunity to reviewers to do extra reviews to clear the backlog.

6. Learning from SJR

6.1. The Mortality Governance Group reviews all SJRs with an overall care score of one or two (and occasionally three) and five such cases were reviewed by the Group in Quarter 3. These involved:

- Failure to escalate a deteriorating patient when NEWS score was high, and staff have undertaken relevant training.
- Overlooked transfer documentation and lack of clarity around consent, and the need to document patient capacity in complex cases.
- Issues with missing Waterlow (pressure area) and MUST (nutrition) assessments with reminders about fluid charts raised at safety huddles.
- Lack of documentation around last hours of life and conversations with family with changes to ward cover since then.
- The use of the care of the dying patient booklet and earlier investigation.

6.2. In keeping with the overall care scores reported for Q3, most of the comments within the SJRs have been documented about good care, including:

- **Documentation –** detailed clerking; clear documentation of discussions with next of kin; and detailed surgical notes.

- **Communication with patient and family –** addressing questions raised by family; explaining the process of dying; keeping the family updated; and acknowledging patients and families wishes for care.
- **Timely care –** prompt treatment, review, and imaging.
- **Senior input –** consultant discussion with families; consultant led decision making; consultant review; and consultant-to-consultant discussion.

The Word Cloud (Figure 11) pulls out the most frequently occurring words in the good care sections of the reviews.

Figure 11

6.3. There are no clear themes arising from the poor care comments for Q3. However, there were a few mentions of issues with record keeping including incomplete paperwork and missing timings. There were occasions where cardiac arrest calls were put out despite a DNACPR decision having been taken.

6.4. The criteria for case selection for SJR are detailed in Figure 12.

Figure 12 **Case Selection for SJR**

SJRs are currently completed at STHFT for hospital deaths referred for one of the following: -

1. Deaths where bereaved families and carers, or staff, have raised a significant concern about quality-of-care provision
2. Deaths of patients with learning disabilities or with severe mental illness
3. Deaths in a service specialty, particular diagnosis, or treatment group where an 'alarm' has been raised with the provider through whatever means (for example via a Summary Hospital-level Mortality Indicator or other elevated mortality alert, concerns raised by audit work, concerns raised by the CQC or another regulator).
4. Deaths in areas where people are not expected to die, for example deaths following elective procedures.
5. Deaths where learning will inform the provider's existing or planned improvement work. These deaths may be identified by the Medical Examiners on a case-by-case basis or be a group of pre-selected cases (for example, until recently, STH has been reviewing all PE deaths).
6. Maternal deaths.

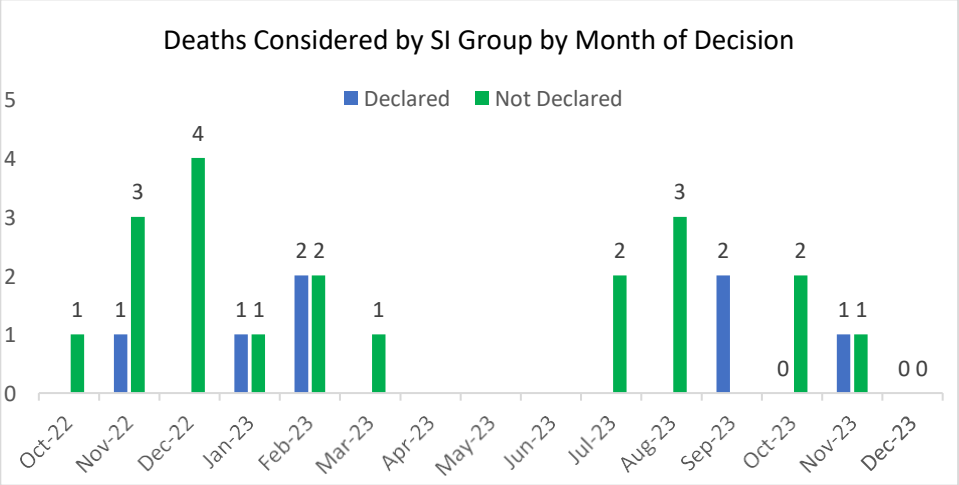
Most cases are identified by the Medical Examiners and this requirement is entered onto the Ulysses database, from which regular searches can be run. Cases are also identified by running searches for deceased patients with Learning Disabilities and/or Autism. A few additional cases are requested directly by staff, for example a member of the Patient Safety Team.

7. Deaths Declared by the Serious Incidents Group to be More Likely than Not due to Problems in Care

7.1. One death was identified by the Serious Incident (SI) process in Q3 (October to December 2023) as being due to problems in care (Figure 12). SJRs are not carried out when there is an SI or PSII underway to avoid duplication and therefore, the SJR request for this case was rejected. Learning included the following issues:

- Ensuring clinical observations are recorded as per the deteriorating patient policy and the implementation of a minimum of four hourly observations on the ward involved.
- Ensuring patients have a medical review when complaining of persistent pain.
- Completing and following up of blood test results.
- Ensuring that patients with gastrointestinal bleeding have appropriate fluid management.
- Inclusion of escalation and treatment plans following endoscopy in line with best practice recommendations.

Figure 12



8. Regulation 28 Prevention of Future Deaths

8.1. No Regulation 28 Prevention of Future Deaths reports were issued to the Trust in Q3.

9. Medical Examiners System

9.1. The date for full role out of community deaths to be reviewed by a Medical Examiner has been extended to 9th September 2024 and an education event on 11th June has provided guidance on the regulations.

10. Conclusion

- The overall crude mortality remains lower than the national average, though when split by admission method, the non-elective mortality is slightly higher than the national average and mortality following elective admission is in line with the national average.
- SHMI remains stable and in the ‘as expected’ range.
- Nine SHMI diagnosis Groups are ‘as expected’ and one, secondary malignancies, is ‘lower than expected’ for STHFT.
- The HSMR remains in the 'higher than expected’ range and has remained fairly stable over the past 12 months. When palliative care adjustment is removed the HSMR reduces to 104.02 (as expected) which suggests variability in coding practices across the country. Further work is ongoing to benchmark against peer organisations to understand the data quality better.
- The mortality outlier status from the National Hip Fracture Data NHFD national audit has resolved in Q3, however, arrangements for a formal BOA review are being made.

- Fracture of neck of femur remains in the ‘as expected’ range for both SHMI and HSMR. When palliative care adjustment is removed from the HSMR model the value falls from 132.2 to 113.5 (still ‘as expected’) showing palliative care coding does impact this diagnosis group.
- Approximately 7% of deaths in Q3 of 2023/24 were referred by the ME for SJR of which 42% have been completed (21/50). Two outcomes scored less than 3 and learning / actions taken in response.
- 71% of SJR outcomes from the 21 cases completed in Q3 showed ‘excellent’ or ‘good’ care overall.