Executive Summary
Report to the Board of Directors
Being Held on 26 July 2022

Subject	Learning from Deaths Report – Q3 2021/22
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Status[1]	A

PURPOSE OF THE REPORT

This is the quarterly 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 2021/22 (1st October – 31st December 2021). It also includes current data on crude mortality, HSMR and SHMI metrics and presents key metrics on the mortality case review process for 2021.

KEY POINTS

There have been 2,832 deaths at the Trust between January and December 2021 and 166 of the requested SJRs have been completed (98.8%).

The 12-month rolling Hospital Standardised Mortality Ratio (HSMR) from 1st March 2021 – 28th February 2022 was 102.6 (98.1-107.2) and banded 'as expected'. The Trust Summary Hospital-level Mortality Indicator (SHMI) value is 0.99 for the period February 2021 to January 2022 and banded "as expected'.

The Q3 Learning from Deaths section considers deaths at STHFT in the period 1st October – 31st December 2021 as follows:

- Total no. adult deaths at STHFT: 742
- Total no. adult deaths subject to Structured Judgment Review (SJR): 33
- 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

33 of 36 referrals for SJR in Q3 have been completed and one case has scored below three.

Of deaths identified via the SJR process, SI process or Coroner's Inquest in Q3 one death was judged more likely than not to be due to problems in care. This related to a patient who died on the ward in Q2 whilst awaiting emergency vascular surgery. The investigation identified that a decision to defer surgery did not account for the full clinical picture. This was considered a potential missed opportunity to arrange more urgent surgery.

Learning points/actions taken from the two SJRs reviewed by the Mortality Governance Committee (MGC) in Q3 with an overall care score of one or two involved awareness and communication of DNACPR decisions, and monitoring of fluid balance.

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 requested to approve the content of the report.

APPROVAL PROCESS

Meeting	Date	Approved Y/N
Trust Executive Group	13 July 2022	✓
Quality Committee	18 July 2022	✓
Board of Directors	26 July 2022	

[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'

Sheffield Teaching Hospitals NHS Foundation Trust
LEARNING FROM DEATHS QUARTERLY REPORT
2021/22 Quarter 3

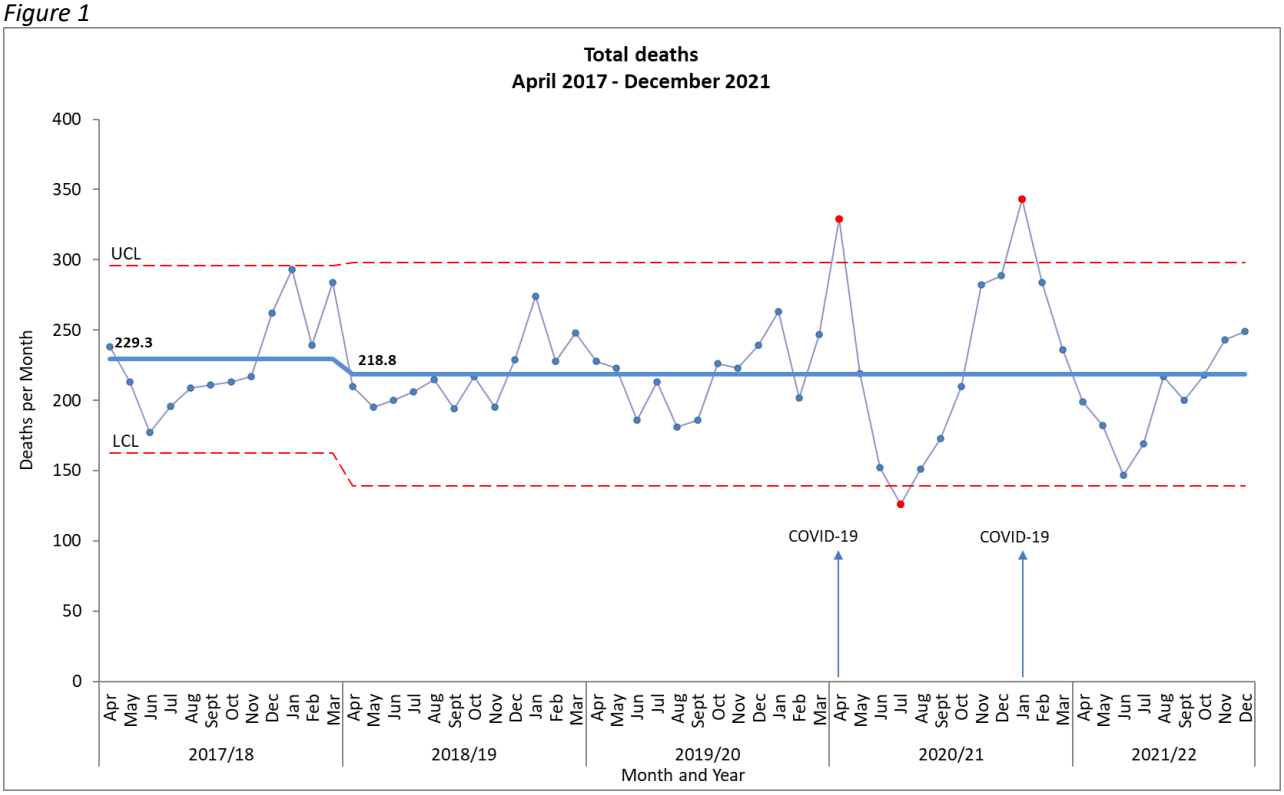
1. Number of deaths by month – Crude mortality

1.1. The data in the charts below show deaths that have been recorded since 1st April 2017 when the SJR process was first introduced. Figure 1 identifies two special cause variations (single points) in April 2020 and January 2021, which correspond with the first and second waves of COVID-19 pandemic deaths.

1.2. A special cause variation was identified in July 2020, indicating a reduced death rate which is in line with data reported nationally. Deaths below average in summer did not offset the high number of deaths in the previous period and were followed by another period of high excess deaths (Source: Office for National Statistics).

1.3. There were 2,832 deaths in Sheffield Teaching Hospitals Foundation Trust (STHFT) between January and December 2021, of which 5% (145) were in the ED and 95% (2,687) were inpatient deaths.

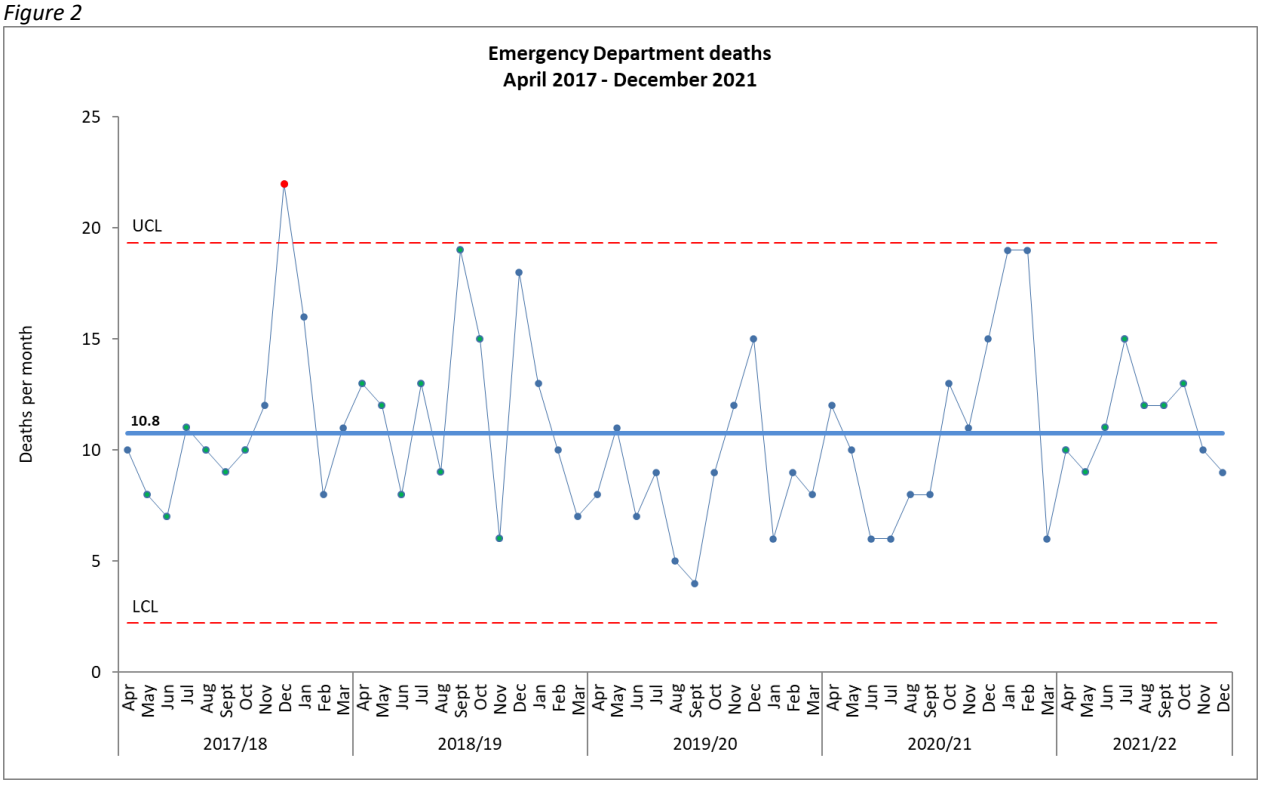
Figure 1



Source: Information Services Report 'Deaths in Hospital'

1.4. Figure 2 shows Emergency Department deaths only, from April 2017 to December 2021.

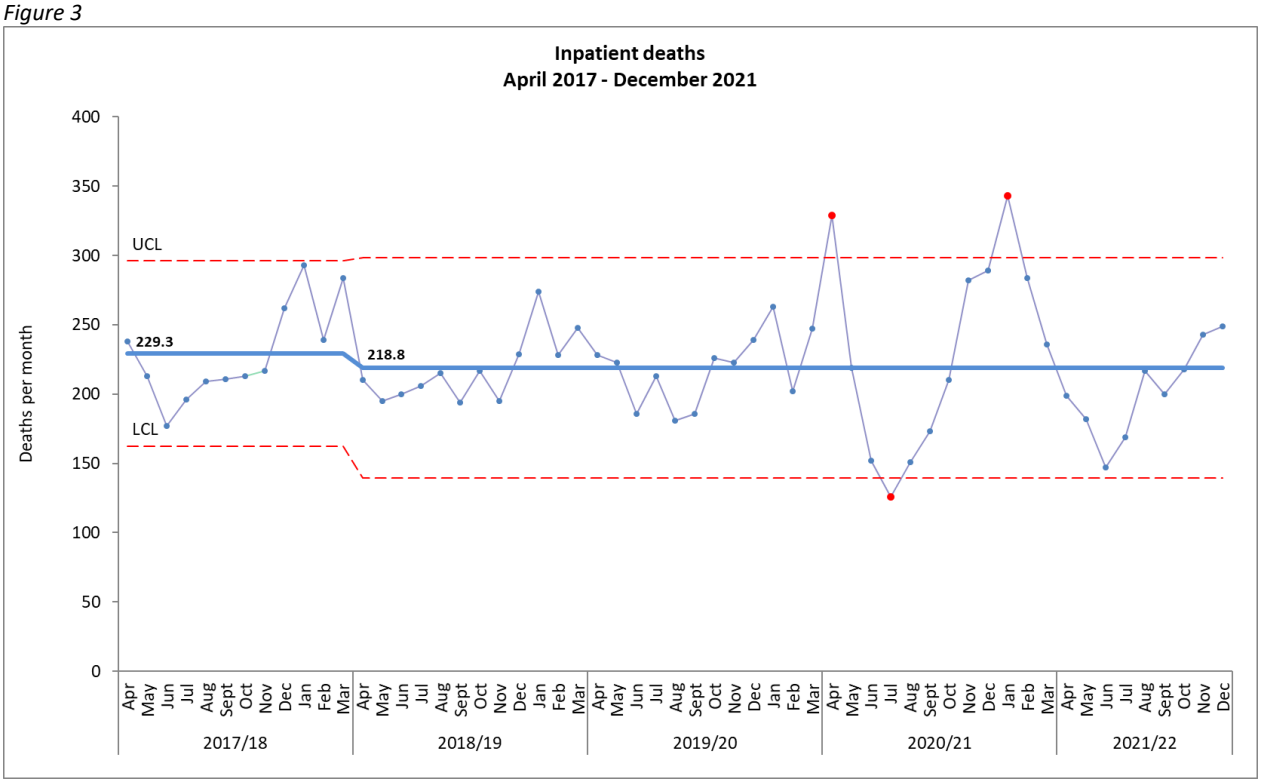
Figure 2



Source: Information Services Report 'Deaths in Hospital'

1.5. Figure 3 shows inpatient deaths only, from April 2017 to December 2021.

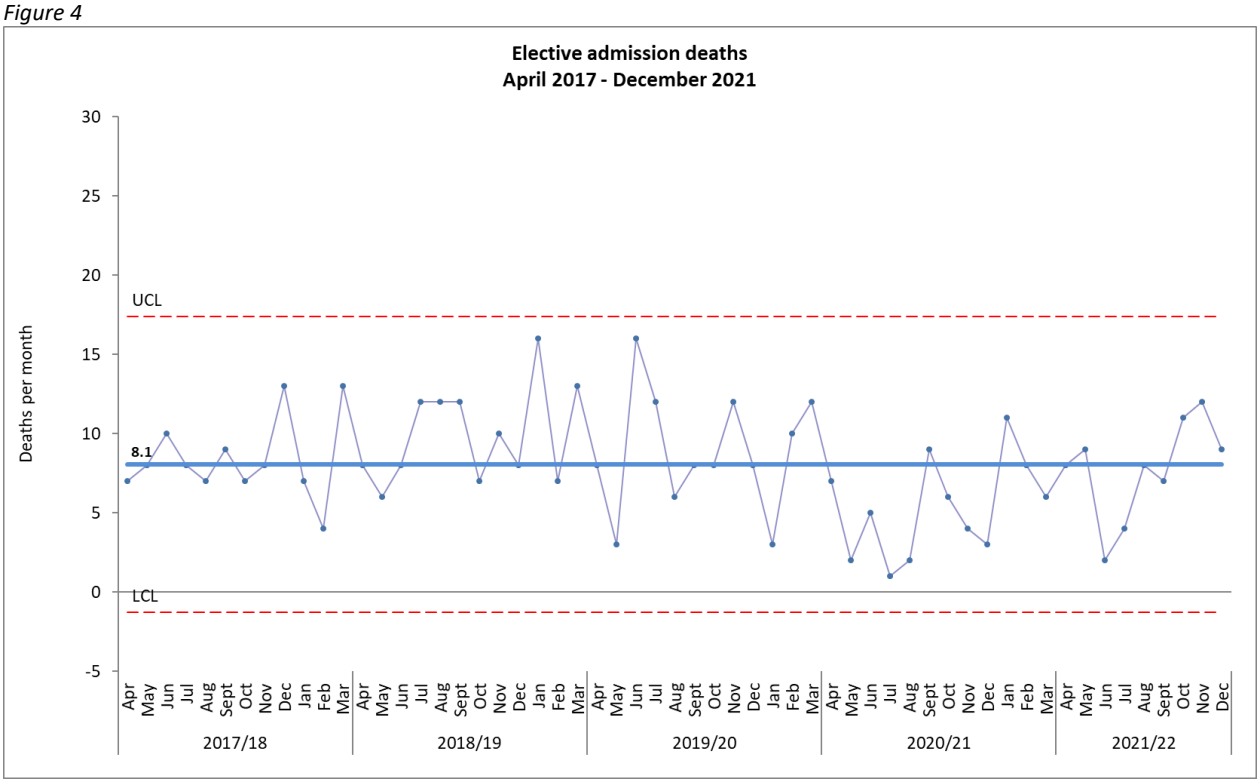
Figure 3



Source: Information Services Report 'Deaths in Hospital'

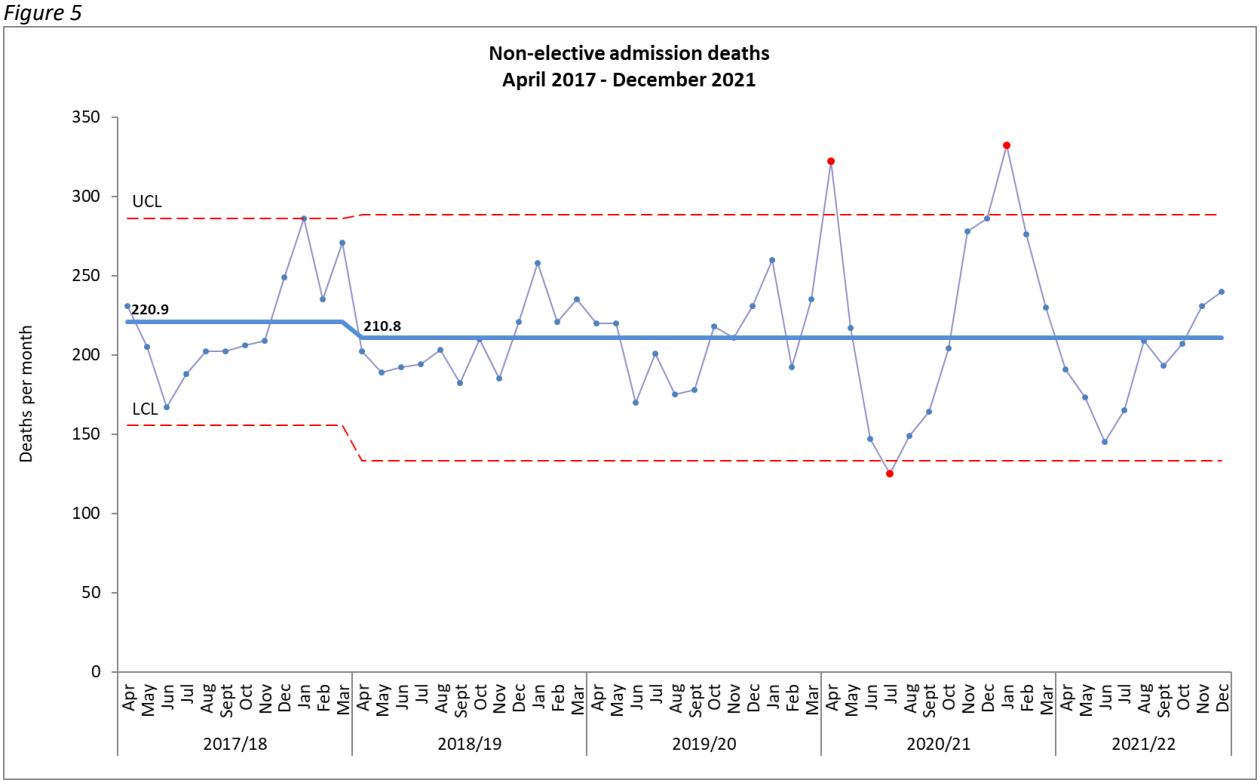
1.6. Mortality following elective admission shows normal variation as depicted in Figure 4 and mortality following non-elective admission (Figure 5) follows the same pattern as seen in Figures 1 and 3.

Figure 4



Source: Information Services Report 'Deaths in Hospital'

Figure 5



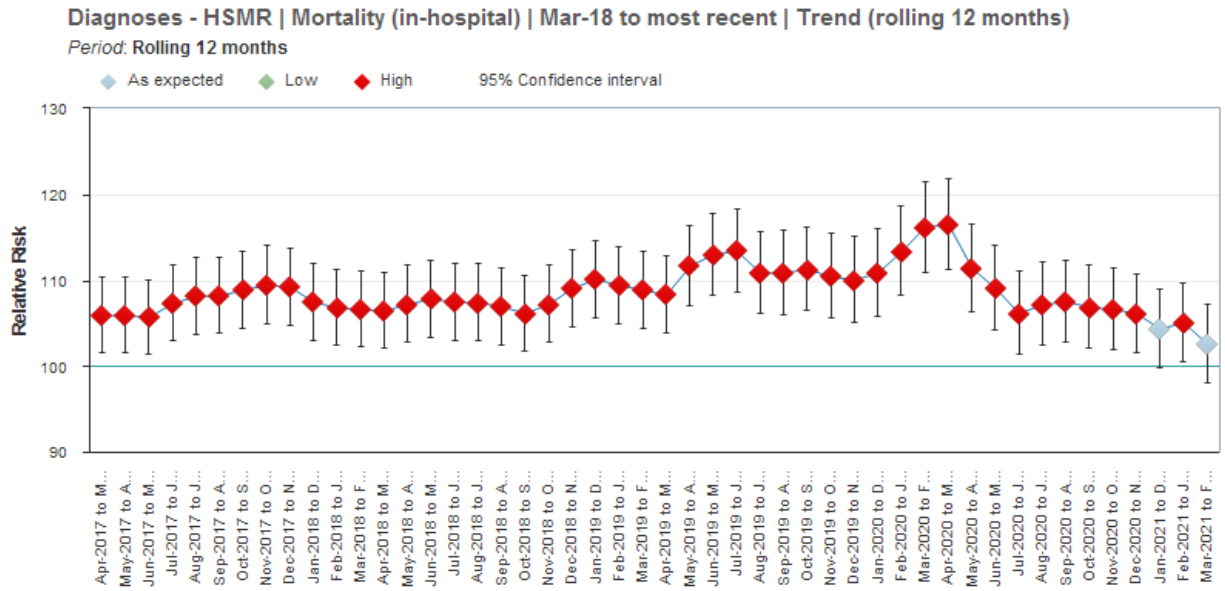
Source: Information Services Report 'Deaths in Hospital'

2. Hospital Standardised Mortality Ratio (HSMR)

2.1. The 12-month rolling HSMR from 1 March 2021 – 28 February 2022 was **102.6 (98.1-107.2)** and banded statistically 'as expected'.

2.2. Figure 6 shows the rolling 12-month HSMR from April 2017 to February 2022 running higher than expected prior to and during the Covid-19 pandemic. A task and finish group, established in September 2020, highlighted several issues that could be affecting the HSMR data model and has implemented a 'business as usual' model to validate, correct and improve data recording and clinical coding, working closely with clinical teams. This has transitioned to become the HSMR Review Group in April 2022 and meets monthly.

Figure 6



2.3. Table 1 shows the split between elective and non-elective admissions (emergency admission mortality figures are shown as a subset of non-elective admissions).

Table 1

Sheffield Teaching Hospitals Admission Type	Superspells	Observed Deaths	Expected Deaths	Rolling 12 months HSMR
All Admissions	86,386	1,961	1912.2	102.6 (98.1-107.2)
Elective Admissions	54,609	56	52.1	107.5 (81.2-139.6)
Non-Elective Admissions	31,804	1,907	1861.9	102.4 (97.9-107.1)
Emergency Admissions only	29,923	1,843	1810.6	101.8 (97.2-106.5)

Source: Healthcare Intelligence Portal, Dr Foster Intelligence

2.4. The rolling 12-month HSMR split by Admission Method (elective and non-elective) is depicted in Figures 7 and 8. The high relative risk from 2018-2019 has been resolved to some extent but the value remains consistently above 100.

2.5. Both graphs demonstrate a reduction in HSMR values between March 2021 – February 2022, demonstrating that corrections to inaccuracies in data quality is positively impacting both metrics.

2.6. The Business-as-Usual Model for investigating diagnosis groups that alert within the HSMR has been trialled for three months and a summary document has been discussed at the monthly Mortality Governance Committee meetings showing progress, areas where clinicians have been involved and provided for the Directorate review process in May/June/July 2022.

Figure 7

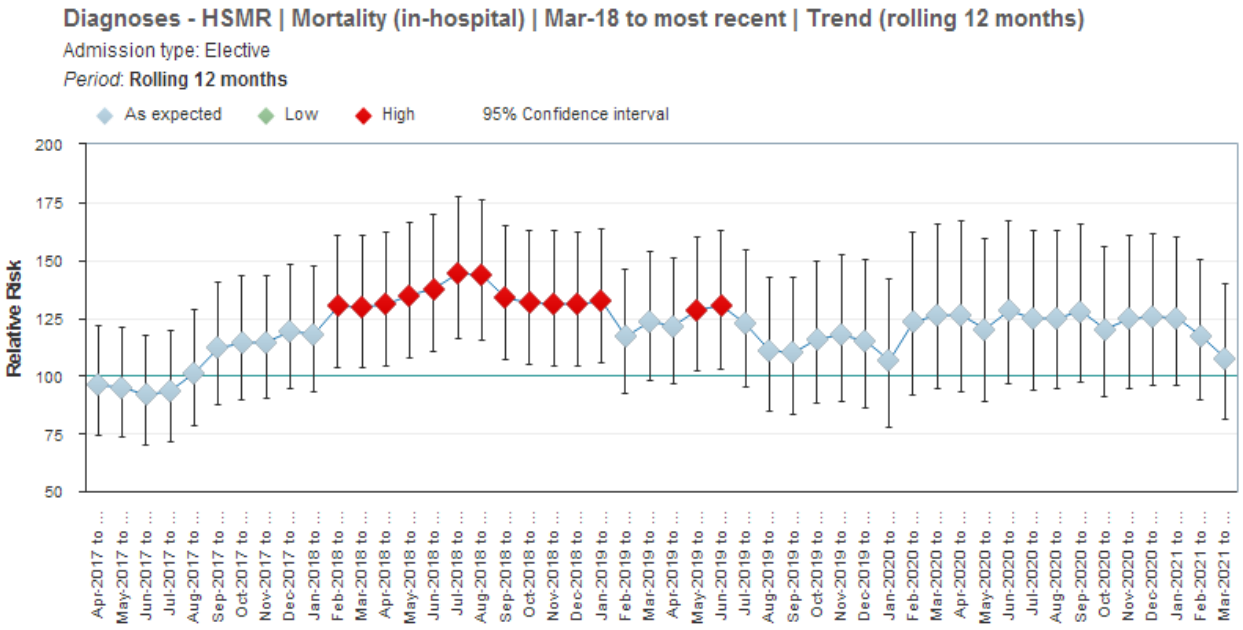
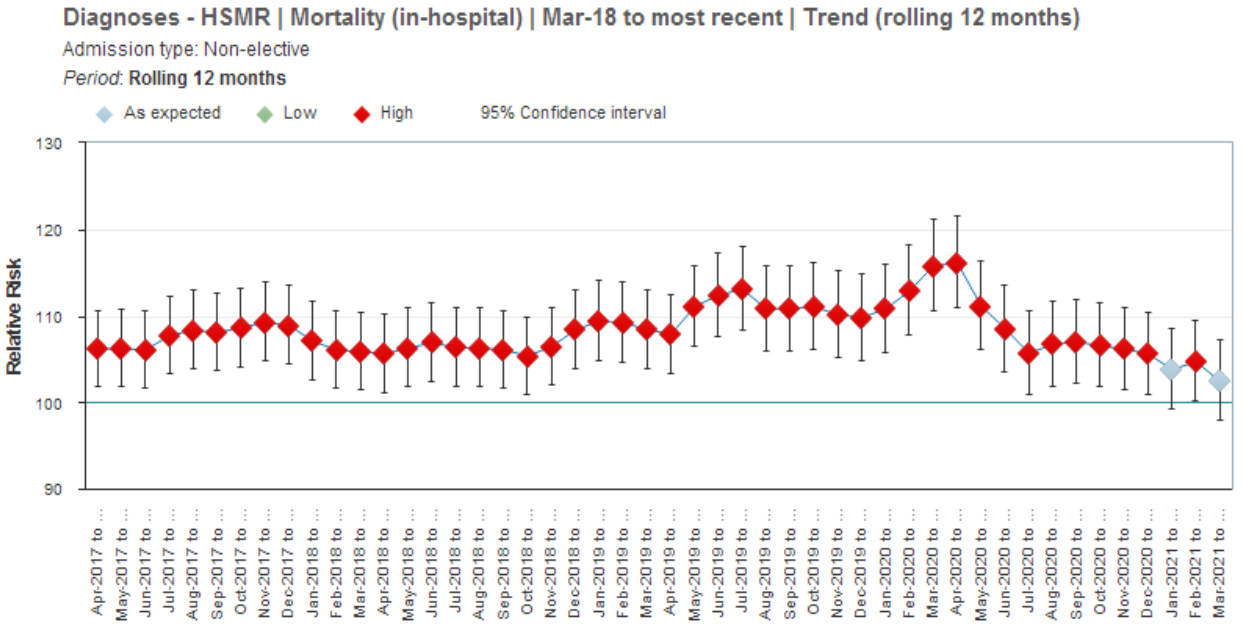


Figure 8



Source of Figures 8 to 11: Healthcare Intelligence Portal, Dr Foster Intelligence

3. Summary Hospital-level Mortality Indicator (SHMI)#

3.1. The Trust SHMI value for the period February 2021 to January 2022 was **0.99 and banded "as expected'** with an expected number of deaths of 3120 versus an observed 3080. A breakdown by site shows Northern General and Royal Hallamshire Hospitals 'as expected' with Weston Park Hospital in the 'lower than expected' banding. The crude mortality rate for elective admissions, as reported, is in line with the national average at 1.0 percent. The crude mortality rate for non-elective admissions is slightly higher at STHFT compared to the national average (3.4 vs 3.3 per cent).

3.2. There has been a fall in the number of spells from March 2020 onwards due to COVID which is excluded. STHFT figure for February 2021 to January 2022 is 88 percent of pre pandemic (January 2019 – December 2019) activity compared with England average 89 percent (elective spells 71 percent and non-elective spells 92 percent). 3.6 percent of STHFT activity has been coded as COVID-19 during the 12-month period and therefore excluded, comparable with the last quarter (slightly higher than the England average of 3.3 percent).

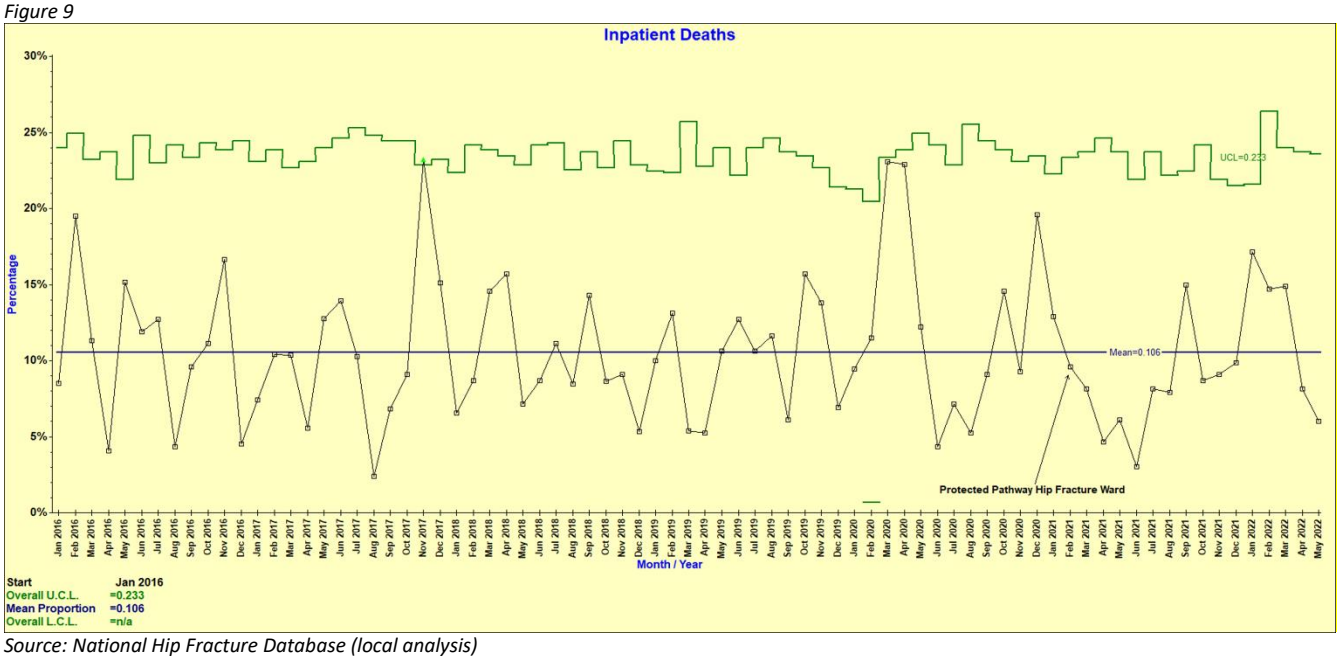
3.3. Palliative care coding has improved to 2.1 – slightly higher than the national average of 2.0 percent (national range varies between 0.6 and 3.7 percent).

3.4. For a subset of 10 diagnosis groups a SHMI value and banding is calculated. All are 'as expected' for STHFT except Fracture of neck of femur which again moved 'higher than expected' at 1.39, up from 1.35. Registration with the SHMI Extract Service has provided access to record level data for the post-discharge deaths and hence it has been possible to review ten cases for the in-hospital care prior to discharge. This cohort of patients are characterised by frailty, palliative care diagnoses and discharge to preferred place of death. Local analysis from the National Hip Fracture Database is presented in Figure 9 and the Covid-19 waves 1 and 2 can be seen followed by the introduction of the Protected Pathway Hip Fracture Ward.

3.5. A greater proportion of STHFT SHMI deaths occur in hospital (71 percent) compared with the national average of 67 percent.

3.6. Sheffield has a higher than national average percentage of provider spells in *deprivation quintile 1* (most deprived, 39.7 vs 23.1) and lower representation in groups 2 to 5 and this will impact mortality rates. 38 percent of deaths at STHFT are from deprivation quintile 1 compared with a national average of 21 percent.

Figure 9



Source: National Hip Fracture Database (local analysis)

Mortality Case Review Process – Structured Judgement Review (SJR)

Table 2 below shows a summary of learning from deaths key performance indicators (KPIs) over the previous 12 months.

Table 2 *(Note – the figures in columns 3 and 4 do not correlate to any other figures due to the time interval between death and outcome of investigations, Inquest, etc.)*

KPI	1	2				3	4
	No. of deaths in month	No. of deaths referred for SJR	SJR completion rate	SJR overall care score 3-5	SJR overall care score 1-2	Deaths more likely than not due to problems in care *(by date of SI Group decision)*	Regulation 28 issued
Jan-21	362	28	**100%** (28/28)	**24**	**4**	0	0
Feb-21	303	11	**100%** (11/11)	**9**	**2**	0	0
Mar-21	242	21	**100%** (21/21)	**21**	**0**	0	0
Apr-21	209	15	**100%** (15/15)	**14**	**1**	0	1
May-21	191	13	**100%** (13/13)	**13**	**0**	0	1
Jun-21	158	13	**100%** (13/13)	**13**	**0**	0	0
Jul-21	184	9	**100%** (9/9)	**9**	**0**	0	0
Aug-21	229	11	**100%** (11/11)	**11**	**0**	0	0
Sept-21	212	11	**100%** (11/11)	**10**	**0**	0	0
Oct-21	231	9	**100%** (9/9)	**9**	**0**	0	0
Nov-21	253	17	**100%** 17/17	**17**	**0**	0	0
Dec-21	258	10	**70%*** (7/10)	**6**	**1**	1 *(death from Aug-21)*	0

Source: Datix PALS, Datix Incidents and Datix Claims

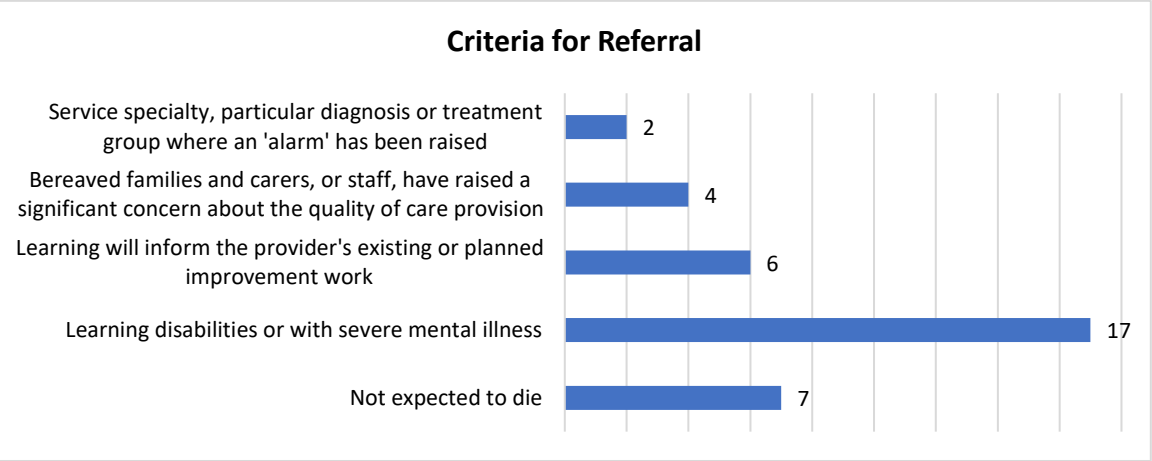
* Two cases are awaiting a second review and one is delayed due to the availability of casenotes. All three are expected to be completed by the end of 2022/23 Q1.

4. Structured Judgement Review (SJR)

4.1. Between October and December 2021 (Q3):

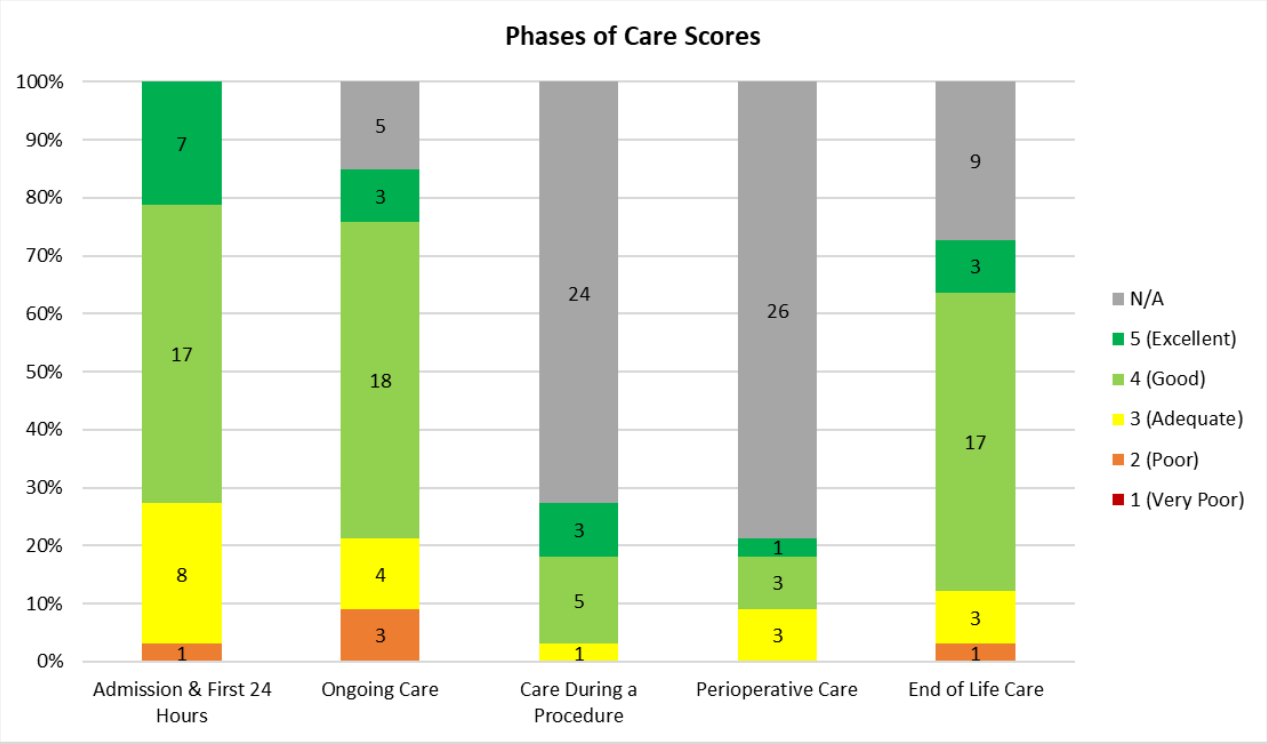
- 36/742 of inpatient deaths met the criteria for a SJR as detailed in Figure 10
- Of the 33 completed adult SJR cases (Table 2), 17 were deaths of patients with a learning disability and/or with severe mental illness
- Scores allocated to each of the SJR phases of care are displayed in Figure 11 for all completed SJRs
- Final overall scores allocated to each SJR are displayed in Figure 12 with 32/33 scores three or above

Figure 10



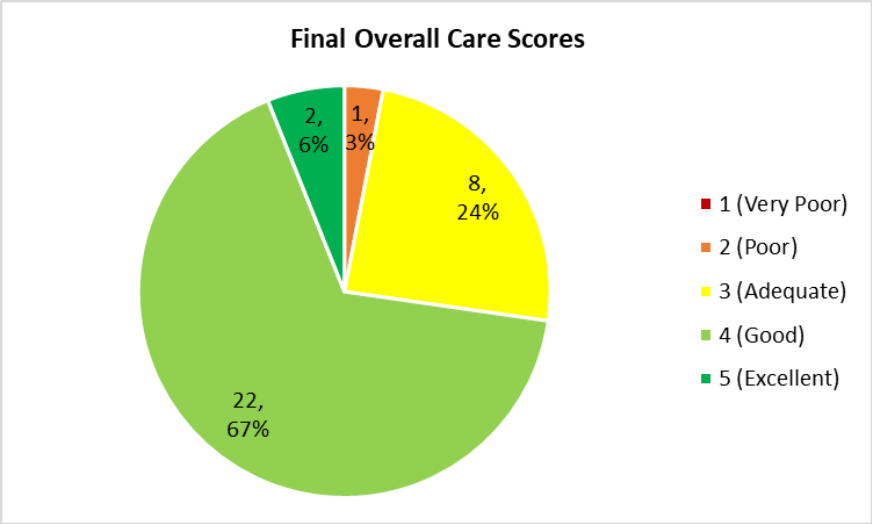
Source: Datix PALS

Figure 11



Source: Datix PALS

Figure 12



Source: Datix PALS

5. Likelihood of deaths being due to problems in care

5.1. One death identified by the SI process reported in Q3 was deemed more likely than not due to problems in care. This related to a patient who died on the ward whilst awaiting emergency vascular surgery. The investigation identified that a decision to defer surgery did not account for the full clinical picture. This was considered a potential missed opportunity to arrange more urgent surgery.

6. Regulation 28 Prevention of Future Deaths Reports

6.1. There have been no Regulation 28 Prevention of Future Death reports issued to the Trust between October and December 2021.

7. Learning

Learning from SJR

7.1. There have been two SJRs reviewed by the Mortality Governance Committee (MGC) with an overall care score of one or two at STHFT between October and December 2021. These are detailed below together with the learning points / actions taken from the review.

- **SJR 8249** (Date of MGC: 19/11/2021): Poor communication around presence of a DNACPR order. A Trustwide DNACPR Audit was undertaken in October 2021 and the results widely disseminated through directorates.

- **SJR 8261** (Date of MGC: 17/12/2021): Issues were identified with monitoring of fluid balance. This was shared through safety and risk forum and was a 'Safety Message of the Month' in February 2022.

8. Summary

8.1. There have been 2,832 deaths at the Trust between January and December 2021 and 165 of the referred 168 SJRs have been completed (98%).

8.2. The 12-month rolling Hospital Standardised Mortality Ratio (HSMR) from 1st March 2021 – 28th February 2022 was 102.6 (98.1-107.2) and banded 'as expected'. The HSMR Task and Finish Group has implemented a new Business-as-Usual model for investigating any alerting groups and, working with the clinical teams, continues to address the underlying issues impacting the HSMR model.

8.3. The Trust Summary Hospital-level Mortality Indicator (SHMI) value is 0.99 for the period February 2021 to January 2022 and banded "as expected'. There is one diagnosis group in the 'higher than expected' range – Fracture of neck of femur. For a proportion of patients that died within 30 days of discharge, the in-hospital care immediately prior to discharge has been reviewed and the patients are characterised by frailty, palliative care diagnoses and discharge to preferred place of death.

8.4. From 1st October – 31st December 2021 there were 742 deaths at the Trust and 33 of the 36 SJR referrals have been completed.

8.5. One death (which occurred in Q2 of 2021/22) reported in Q3 was judged more likely than not to be due to problems in care and was identified via the SI process. This related to a patient who died on the ward whilst awaiting emergency vascular surgery. The investigation identified that a decision to defer surgery did not account for the full clinical picture. This was considered a potential missed opportunity to arrange more urgent surgery.

8.6. Learning points/actions taken from the two SJRs reviewed by the Mortality Governance Committee (MGC) in Q3 with an overall care score of one or two involved awareness and communication of DNACPR decisions and monitoring of fluid balance.