Board of Directors (October 2022)

Subject:	Learning from Deaths Group Report			**Date: 6th October 2022**
Prepared By:	Main report: John Tansley, Clinical Director for Patient Safety & Chair Learning from Deaths Group LeDeR update: Lisa Richmond, Specialist Learning Disability Nurse			
Approved By:	David Selwyn, Medical Director			
Presented By:	David Selwyn			

Purpose

The purpose of this paper is to update Trust Board with summary information and assurance of mortality intelligence reviewed by the Learning from Deaths group and to provide an update of the ongoing work to both respond to and improve that intelligence and learning.

Approval	
Assurance	x
Update	x
Consider	

Strategic Objectives

To provide outstanding care	To promote and support health and wellbeing	To maximise the potential of our workforce	To continuously learn and improve	To achieve better value
x	x	x	x	x

Overall Level of Assurance

	Significant	Sufficient	Limited	None
		x		

Risks/Issues

Financial	Consistent Divisional job planning of mortality review activities is required which is likely to demonstrate a funding gap
Patient Impact	Improvements to services and care will be realised through the timely and comprehensive review of each death to maximise learning opportunities
Staff Impact	Changes to practice and care will be identified through the Mortality Review Process. Clinical Staff remain significantly stretched and proposed changes in mortality review processes may potentially intensify this in the short term
Services	Changes to practice and care will be identified through the Mortality Review Process
Reputational	Potential to impact on HSMR and SHMI with external regulator interest

Committees/groups where this item has been presented before

None

Executive Summary

This report provides an update on mortality intelligence and the work of the Learning from Deaths group since the last report to the Board of Directors in February 2022 and provides details of progress against actions identified in that report and proposals for actions in the next 6 months.

The Board of Directors is asked to note:

- The Trust HSMR remains statistically high for the 12 months to May 2022 (**119.4**) whilst the SHMI for a similar period remains as expected (**99.17**)

- External 360 audit suggests that this is an artefact produced by external data handling, related to Specialist Palliative Care coding as quality of our internal coding is appropriate based on recorded clinical activity. There may be opportunities to explore changes to either our record keeping or structure of commissioned services which could improve this position. This will require action by clinical teams and is a medium term plan
- In the short term to try to avoid missing potentially important signals in the data we propose a triangulation method based on existing data and describe the outputs of that
- We have begun the processes to allow individual case record re-identification from our local data uploads for future clinical reviews. We can update that an interim report on an ongoing review triggered by a Sepsis mortality alert is reassuring although that piece of work is not yet fully complete
- Progress on the Datix IQ governance platform has been good on the technical side but clinical engagement with proposed changes to the mortality review tool and SJR process has been more challenging, not helped by ongoing clinical operational pressures. This has been handed back to the Divisional Mortality leads to help progress
- Mortality reviews have identified themes around record keeping, recognition of dying and advanced care planning (ReSPeCT). These themes are also seen in feedback from the external LeDeR reviews. A full LeDeR report is attached as an appendix to this report. The group feels that these may represent areas for thematic reviews as Patient Safety Incident Response Framework (PSIRF)
- The Trust has received positive feedback from recent inquests regarding developments in our Incident investigations but we have concerns around how to rationalise the diverging demands of Systems level and individualised investigations represented by PSIRF and established requirements to address family and Coronial concerns
- In Q3 & 4 2022/23 The Learning from Deaths Group will:

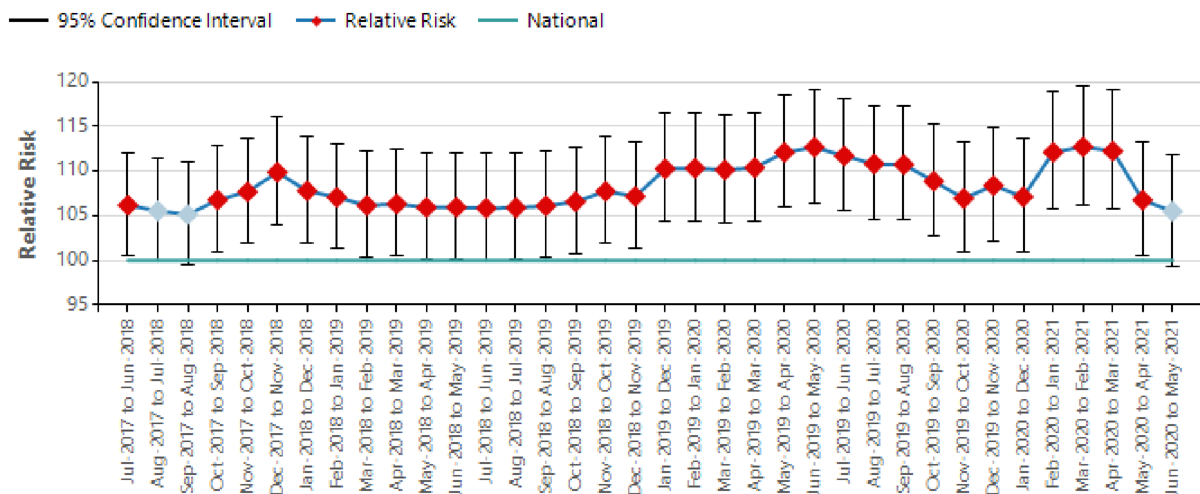
    - Continue to work with our external provider and our internal analysts to refine our mortality data intelligence
    - Signpost Clinical Mortality leads areas which require further investigation and use findings to direct improvements and update on those areas where work is ongoing
    - Continue to support the Divisions in establishing a workable mortality review tool on the Datix digital platform supported by processes and training
    - Continue to ensure that mechanisms for Learning from Deaths work constructively and collaboratively with other internal and external governance processes.

1) Dr Foster Mortality Data

The Trust Hospital Standardised Mortality Rate (HSMR) for the 12 months to May 2022 remains statistically significantly higher than expected at 119.4 (116.6 excluding Covid, but still significantly high).

In previous reports to the Trust Board, the Learning from Deaths (LFD) group have described our ongoing work to understand the significance and causes of this as it is not reflected in our most recent Standardised Hospital Mortality Index (SHMI; year to March 22) which is 99.17 and as expected.

We believe that a significant contribution to this is how the Trust manages and codes end-of-life care as we are a significant national low-outlier in the number of cases with a specialist palliative care coding. End-of-life and specialist palliative care are distinct in coding terms. We identified an apparent step-change around the period of September 2019 as shown in Figure 1.1 below.



The Trust commissioned an external auditor, 360 Assurance, report to review relevant data around this time to provide assurance around data quality compared with clinical activity as we are concerned that we may miss potentially important signals against a background of constant alerting. The draft report was made available to us in April 2022 and has been shared with the Audit Assurance Committee.

This report suggests that the HSMR signal is anomalous. There are no concerns around our coding practices, although concerns were raised by the coding team to the auditors around the completeness and accuracy of the clinical records. There is no formal way for us to be reassured about the coding behaviour of other trusts or how they might code the clinical activity as recorded in the medical records, but we can be reassured that our coding output accurately represents the reality of our end-of-life and palliative care provision. It therefore remains for our clinical teams to explore if they can

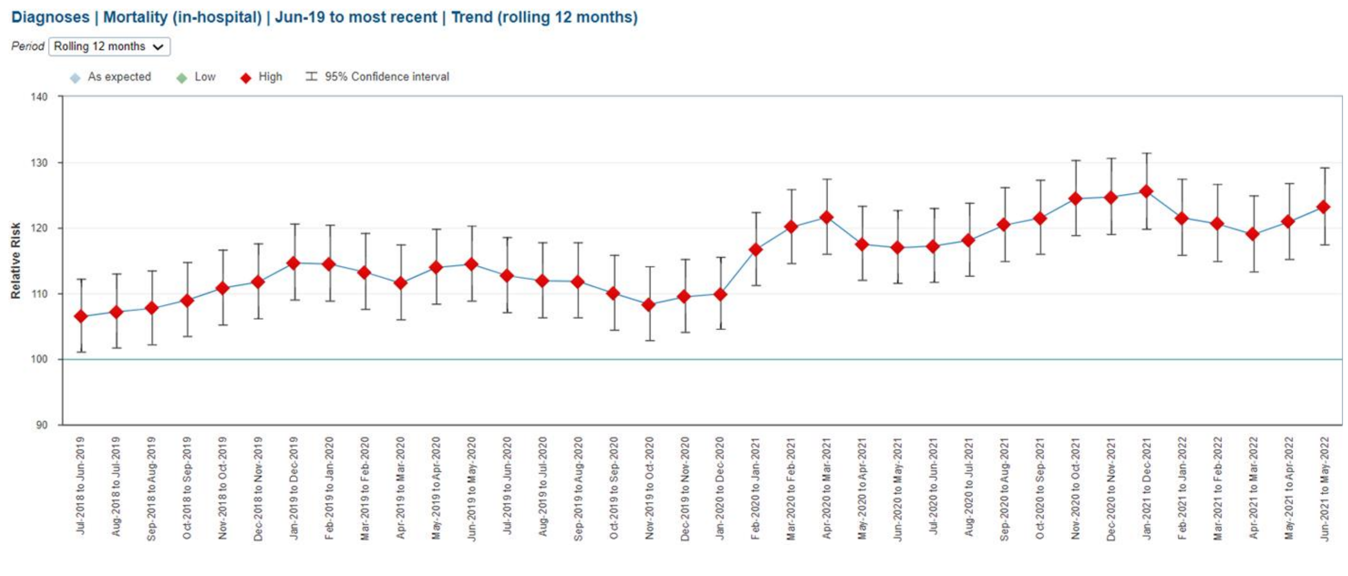
either agree appropriate ways of recording care within the rules of coding which might realign us with other Trusts or whether a more formal restructuring of the pathways would be required, whilst recognising there are no current concerns around the quality of care. Work at the clinical level, to understand the complexity and implications of this, are ongoing.

An additional observation of the report was that the mortality data from Dr Foster are subject to several months' delay which has been exacerbated occurrences where our data submission has missed the deadline and required a further "lag" in our figures to be applied- some Trusts apply this lag by default but the benefits of this improved accuracy must be weighed against timeliness.

In the light of this report, given these reservations around HSMR, the LFD group has considered how best to proceed. We propose two approaches

1) Using existing metrics derived from our coding submission to identify areas for further investigation. It seems sensible that a diagnosis group that alerts in HSMR, CUSUM and SHMI should be looked at in further detail. Following a hiatus is our ability to re-identify individual cases from the Dr Foster data, due to the way data has been handled between the Trust NHS-D and Dr Foster, we are now able to use our local data submission for this purpose. Training for our clinical mortality leads on the use of this platform is in progress. Details of diagnosis groups to be investigated in this way follow later in the report.
2) Provision of more up-to-date data to clinical teams from our local data warehouse which might allow us to identify trends earlier than currently. The recent appointment of a Chief Digital Information officer will be pivotal to this and we have had very encouraging proposals, so far. We hope to be able to update the Board on this work, in the next report.

Figure 1.2 – All cause mortality RR, HSMR and SHMI Trend (rolling 12 months)



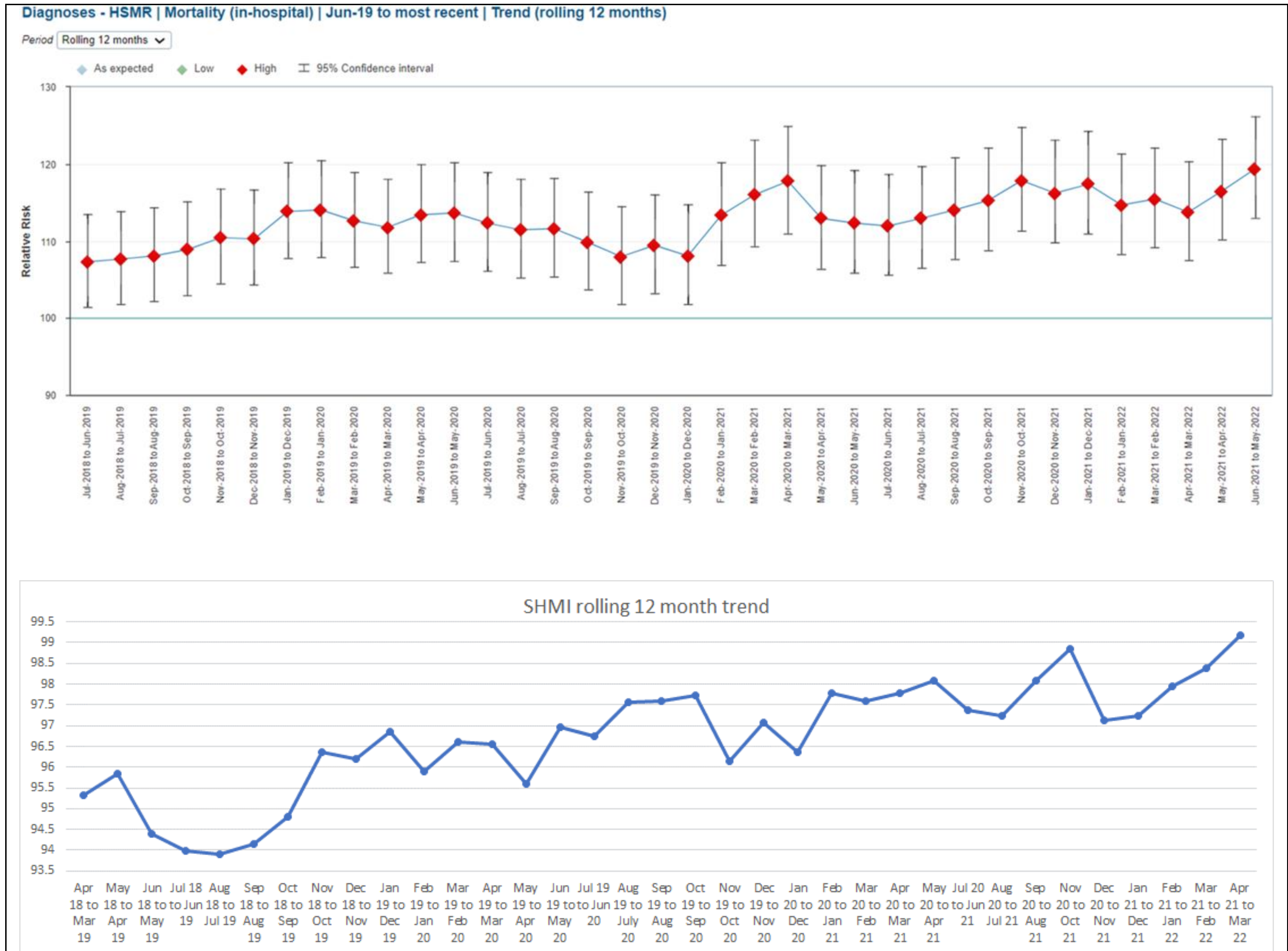


Figure 1.2 shows Rolling 12-month trends for all-cause mortality relative risk (crude vs. expected), HSMR and additionally SHMI which we have not previously used in this way. Whilst SHMI remains as expected the recent upturn is worthy of monitoring.

Trends in coding

Palliative Care: The Trust continues to see a low rate with both the HSMR and across all activity. This will continue to impact on the Dr Foster model (HSMR) but will not impact the SHMI.

Comorbidity rates (Non-elective HSMR): As can be seen within Figure 1.3 the Trust has a lower proportion of activity a 0 Charlson score and higher proportion with a score of above 20.

Signs & Symptoms: The Trust has a slightly higher rate of signs & symptoms with peers both regionally and nationally.

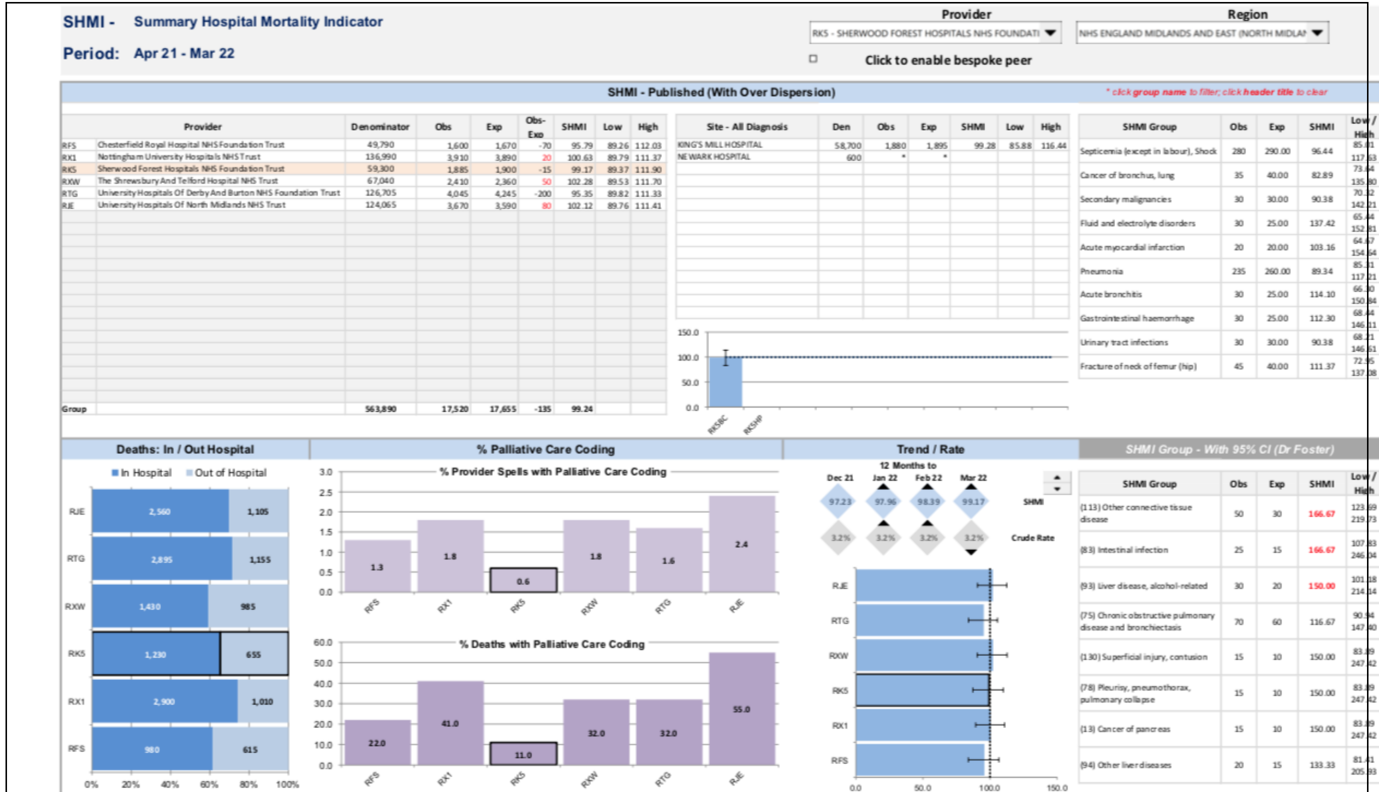
Figure 1.3 – Coding Rate Vs National

Coding / Casemix	Trust	Peer	National
% Non-elective deaths with palliative care (HSMR)	10.4%	32.3%	39.8%
% Non-elective spells with palliative care (HSMR)	1.6%	4.0%	4.9%

% Spells in Symptoms & Signs chapter	7.6%	6.7%	7.2%
% Non-elective spells with Charlson comorbidity score = 0 (HSMR)	38.6%	40.9%	41.5%
% Non-elective spells with Charlson comorbidity score = 20+ (HSMR)	17.4%	16.7%	15.8%
% Non-elective spells in Risk Band (0-10%) (HSMR)	84.0%	85.6%	84.7%

Outlying diagnosis groups

Metric	Result
HSMR	HSMR: **119.4** statistically significantly higher than expected (**116.6** excluding COVID)
HSMR position vs. peers	One of four 'above expected' organisations within the peer group of eight with a crude rate of 4.0% vs 3.1%.
All Diagnosis SMR	SMR: **123.2** statistically significantly high (**118.5** excluding COVID)
Significant Diagnosis Groups	11 groups (6 new): • **Chronic obstructive pulmonary disease and bronchiectasis** (Within HSMR basket) • **Viral infection (COVID-19 primary diagnosis)** • **Deficiency and other anaemia** (Within HSMR basket) • **Intestinal infection** • **Other connective tissue disease** • **Abdominal Hernia (new alert)** • **Epilepsy, convulsions (new alert)** • **Pleurisy, pneumothorax, pulmonary collapse (new alert)** (Within HSMR basket) • **Other liver diseases (new alert)** (Within HSMR basket) • **Fracture of neck of Femur (new alert)** (Within HSMR basket) • **Aspiration pneumonitis, food/vomitus (new alert)** (Within HSMR basket)
CUSUM breaches	There are currently 17 diagnosis groups breaching the 99% Threshold over the 12 month period to May 22 with 3 in- month breaches: • Congestive heart failure, nonhypertensive • Epilepsy, convulsions • Other liver diseases There are 4 diagnosis groups breaching at 99.9%



We have identified three outlying diagnosis groups using the proposed triangulation process which have been identified to appropriate clinical teams for case note review. We are reassured, having discussed these cases in our meeting, that many of the cases will have been picked up by existing governance cases and a gap analysis will only identify a small amount of additional work to be done.

Intestinal Infection- there seems to be a significant contribution from recent C. difficile infections here.
Other Connective Tissue Diseases- this group includes falls.
Liver disease- this is an established outlying group and clinical teams have previously been engaged.

Additional areas of local interest

Sepsis- CUSUM alert February 2022- 21 out of 31 identified cases reviewed to date awaiting formal report but early indications are of no clinical concerns, some coding issues.

Fractured Neck of Femur- new alert in June 2021 following data rebasing (previously same local data produced no alert, changes due to national data and algorithm) 6 observed deaths vs 2 expected.

2) Review of Deaths and Structured Judgement Review (SJR)

Fig 2.1 SFH Mortality review tool

Inpatient & Emergency Department Deaths	Total Deaths	Mortality Reviews completed	% Reviewed
Apr-22	157	114	72.61%
May-22	168	75	44.64%
Jun-22	118	57	48.31%
Qtr 1 **Year 22/23**	443	246	55.53%

The standalone Trust mortality tool remains in use. As before, the routine review of deaths by clinical teams remains significantly in arrears and we are not meeting the locally agreed target of 90%. The learning value of this activity remains questionable, but we have not agreed on an updated operational process which the Divisions support. The Divisional mortality leads have been tasked with co-creation of a solution to the challenges that the LFD group have previously identified in reports to the Board. This will take the form of a task and finish group which we expect to report in our next update. The digital infrastructure to introduce new processes is now in place. The Learning from Deaths Policy is scheduled for review, we have asked for an extension (as it has recently been refreshed) pending the recommendations of this T&F group.

Fig 2.2 Q1 Data from ME Office – Acute Adult Deaths

Apr 22 - 157
May 22 - 168
June 22 - 118 Total = 443

100% of all deaths were scrutinised & within the following timeframes –
Day of death or 1st Day after death - 286
2nd Day after death - 79
3rd Day after death - 62
4th Day after death - 11*
5th Day after death - 5 *
Over 5 days - Nil

MCCD's issued within 3 calendar days of death (Excluding referrals to Coroner) = 97.4%

*4th & 5th These relate to deaths on Friday nights, next working day being Monday which is already 3rd day after death and also bank holiday weekends

Q1 Data from ME Office – Acute Child Deaths

We had none reportable in Q1

Q1 – Data from ME Office – Community Deaths.

39 x community deaths were scrutinised during Q1

The Medical Examiner service continues to perform effectively against demanding deadlines and whilst it remains independent we have a good working relationship with colleagues in the service, particularly in the form of the service identifying deaths which require statutory Structure Judgement Review (SJR e.g. LeDeR,

Mental Health Act deaths etc.) and other cases which may produce learning from further investigation via the Trust's Datix system. The number of SJRs identified are shown in Figure 2.3 below the mean being close to 10% of total deaths.

Figure 2.3 Structured Judgement review requests at Q3 2022/23

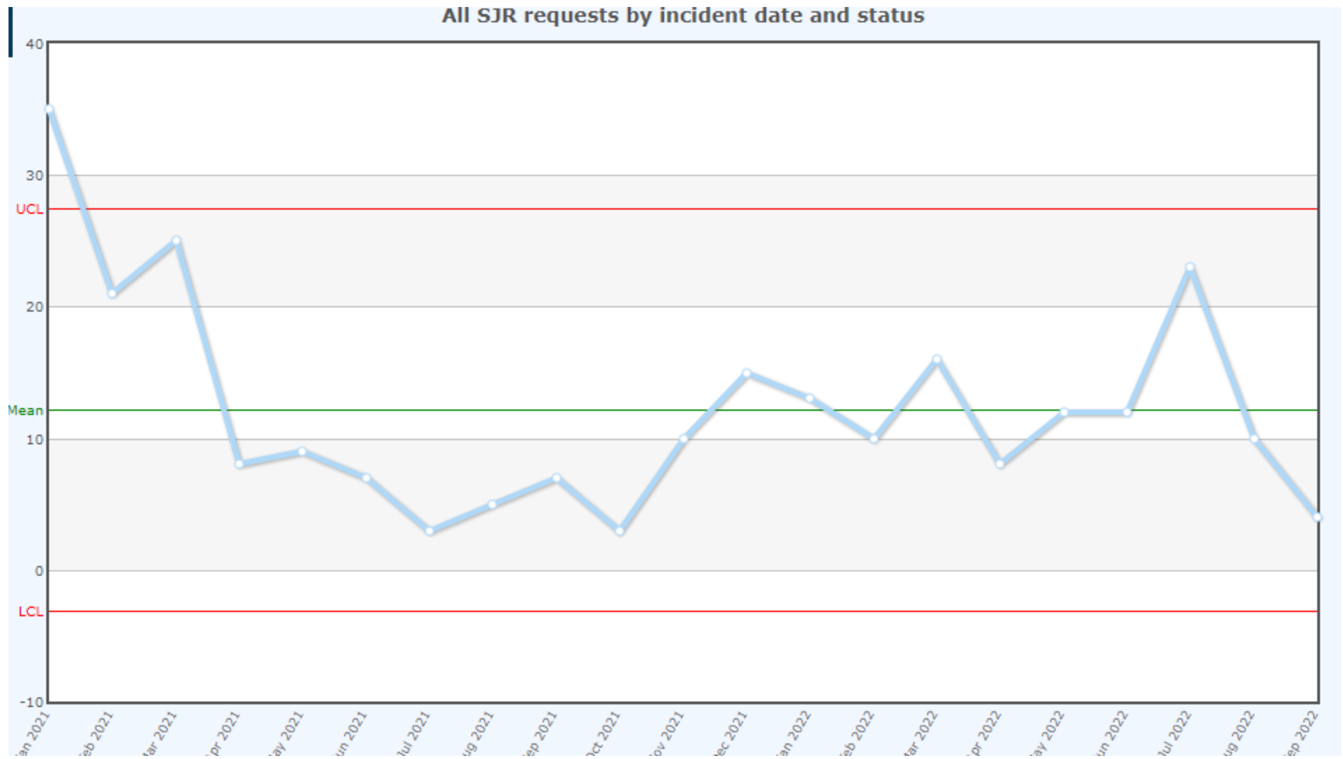
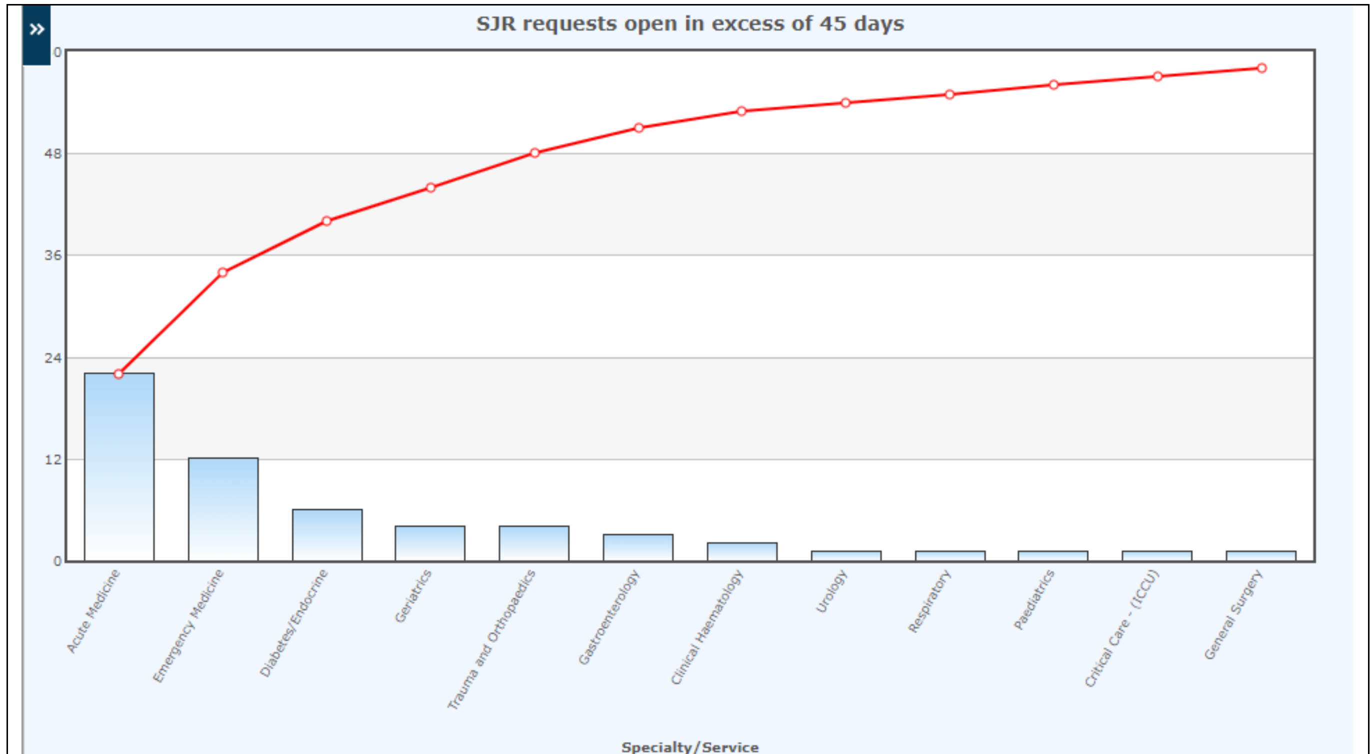


Figure 2.4 shows our progress in reviewing the SJRs requested. Of note, Acute and Emergency Medicine have the largest number of reviews outstanding. This may reflect the fact that these services are subject to much of the operational pressure at the front door which the Trust continues to experience. One of the obstacles to agreeing a new mortality review process has been the challenges of the proposal to provide dedicated/ protected job-planned time to mortality reviewers. Allocation to this resource is typically prioritised behind direct clinical care.

An unintended consequence of our mortality management processes operating to different timescales has been a small number of cases where the death certification or Coronial processes have proceeded ahead of our internal incident investigation processes. We have had recent conversations with HM Coroner about the impact of this and subsequent sharing of any unanticipated learning. The bereavement centre does check Datix routinely- a task that will be much improved now that bereavement centre records are moving onto the Datix system, hopefully closely followed by the MRT and SJR process when a pathway is agreed. In the short term an additional disclaimer form to be completed by the Doctor completing the MCCD confirming that having discussed with the responsible clinician there are no incidents has been introduced in collaboration with the ME office.

Figure 2.4 Structured Judgement review requests at open in excess of 45 days at Q2 2022/23



Learning themes from SJRs

There are ongoing concerns regarding the quality of the SJR reviews. The Lead Medical Examiner has fed back that he feels that consistency is improving but external feedback from the LeDeR review process suggests that the information in some reviews is too sparse to be useful. This has also been found at other acute hospital providers.

Poor documentation has been raised in both internal and LeDeR reviews. Specific concerns have been raised by Acute Medicine around the mismatch between standard Trust forms and the way Doctors are trained to assess patients. Previous reports from this group have suggested that the design of our documentation may be influencing both care delivered and coding. This may be an area which should be reviewed as part of the Trust's patient safety Response Plan which requires identification of a small number of integrated improvement initiatives.

Advanced care planning, recognition of dying and the ReSPECT process are also common themes of LeDeR and routine reviews. The Trust has a ReSPECT working group which feeds into Patient Safety Committee via the Deteriorating Patient Group. The LD lead nurse is part of this group.

The full LeDeR report is attached in Appendix 2

Feedback and Learning from inquests
The Trust has given evidence at several Coroner's inquests and some feedback is described below;

- Patient sent back to ED hours immediately after discharge from T&O as raised temperature and nauseous. Seen in ED by T&O junior who suspected UTI and requested MSU and discharged back to care home. MSU negative (on electronic count), but result not seen. Accepted this was a lost opportunity to consider an alternative cause for deterioration and possible admit. To update coroner with any changes to practice by 30 September.
- Same patient – final ED discharge observations temperature had increased (37.6 to 38.7), but not escalated to trained staff as EWS only 2. Feeling was that escalation protocol may be too rigid, especially

where patient is not staying under observation. To update coroner with any changes to practice by 30 September.

- Patient on warfarin sustained head injury and attended ED. CT small bleed. No consideration of whether to reverse warfarin as well as withhold. Coroner found investigation report thorough and helpful. Requested sight of new HI guideline once moved from draft to implemented.
- Patient attended after head injury. On reversible DOAC but no consideration given to reversing – although evidence was if it had, risks from reversal may have been higher.
- Response to variceal bleed in hospital considered suboptimal – T&O could have usefully been signposted to the GI bleed bundle.
- Critical medication overlooked for 2 days – sight of underlying condition lost by clinicians managing immediate complex medical condition. Need for clear prompt to regularly reconsider any critical medications that aren't prescribed immediately on admission.

Coronial feedback on the two governance reports produced after the multidisciplinary (Learning Teams style) review meeting approach has been very positive. The Trust Solicitor has also had positive feedback from staff- which is encouraging in our journey towards a 'just culture'. The challenge remains getting meetings and reports together promptly and efficiently after incidents as clinical input is recognised as being associated with added quality and learning.

There is an element of concern around the new Patient Safety Incident Response Framework (PSIRF) which has finally been published. PSIRF changes the context for the Trust to conduct investigations following incidents, moving away from individual investigations to more thematic investigations. However, this appears to have been undertaken without significant changes in the requirements from HM Coroners. On-going reports from Trusts (usually as a product of an SI investigation) and may also pose a challenge to our ability to provide answers to individual families. These challenges are not unique to SFH and we will take advantage of the experience of local early adopters (including our new Executive Chief Nurse) over the next 12 months.

3) Remaining outstanding 360 Assurance action

One action remains outstanding from the 2020 360 Assurance report on Learning from Deaths at SFH. This required the review of Terms of Reference (ToR) and minutes from the individual specialty and Divisional Mortality and Morbidity (M&M) meetings by the LFD group. A Trustwide review of Governance meetings which supersedes this action was discussed at TMT on 17/08/22 agreeing standardised format for ToR, Action trackers and Highlight reports across the Trust. M&M are not required to be formally minuted but will required to provide Highlight reports. We can confirm that we are now getting regular updates according to our work plan with Divisions moving towards the agreed format. Examples of highlight reports in the Trust format are enclosed in Appendix 3. We hope this will allow us to close this action.

4) Dashboard

Our mortality dashboard continues to evolve for use both in our meetings and for outward communications of our activities and learning. This contains a data from macro to micro (individual family feedback) scales.

The latest quarterly position is included in Appendix 4

5) Plans for Q3 & 4 & 2022/23

The Learning from Deaths Group will:

- Continue to work with our external provider and our internal analysts to refine our mortality data intelligence and actively monitor and review HSMR and SHMI to triangulate any clinical concerns
- Signpost Clinical Mortality leads areas which require further investigation and use findings to direct improvements
    - Update on those areas where work is ongoing
- Continue to support the Divisions in establishing a workable mortality review tool on the Datix digital platform supported by processes and training
- Continue to ensure that mechanisms for Learning from Deaths work constructively and collaboratively with other internal and external governance processes.