Oxford University Hospitals
NHS Foundation Trust

Cover Sheet

Public Trust Board Meeting: Wednesday 28 September 2022

TB2022.082

Title:	**Learning from deaths annual report 2021/22**

Status:	**For Information**
History:	**This is an annual paper to the Trust Board**

Board Lead:	**Chief Medical Officer**
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Confidential:	**No**
Key Purpose:	**Assurance**

Executive Summary

1. During 2021/22 there were 2647 inpatient deaths reported at OUH. 2583 (98%) of cases were reviewed within 8 weeks. Divisions with deaths which were not reviewed (64) within 8 weeks have been requested to complete a Level 1 screening review and compliance is monitored via the monthly Mortality Review Group meeting.
2. One death was judged more likely than not to have been due to problems in the care provided. This case was escalated to a serious incident requiring investigation (SIRI) following discussion at Mortality Review Group. Learning from this investigation is included in this report.
3. The Medical Examiners (ME) and Medical Examiner Officers service is well established at the organisation working closely with the Regional ME, the National ME and the Coroner's Office to extend the service to scrutinise deaths within the local hospices and in the community setting during 2022-23.
4. Key actions and learning points identified in mortality reviews completed during 2021/22 are presented to the Trust Board. This follows from the Quarterly reviews of Learning from Deaths which were presented in November 2021, January 2022, May 2022, and July 2022 - Board meetings and papers - Oxford University Hospitals (ouh.nhs.uk)

Recommendations

5. The Public Trust Board is asked to note the content of this report for information.

Contents

Learning from deaths annual report 2021/22

1. Purpose

1.1. This paper summarises the key learning identified in the mortality reviews completed for 2021/22.

1.2. This report provides an overview of Trust-level mortality data and performance for the latest available Dr Foster Intelligence data, providing assurance that any highlighted concerns are investigated thoroughly, and appropriate action was taken.

2. Background

2.1. OUH is committed to accurately monitoring and understanding its mortality outcomes. Reviewing patient outcomes, such as mortality, is important to help provide assurance and evidence that the quality of care is of a high standard and to ensure any identified issues are effectively addressed to improve patient care. Reviewing mortality helps fulfil 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.

2.2. OUH uses mortality indicators such as the Hospital Standardised Mortality Ratio (HSMR) and Summary Hospital Level Mortality Indicator (SHMI) to compare mortality data nationally. This helps the Trust to identify areas for potential improvement. Although these are not a measure of poor care in hospitals, they do provide a ‘warning’ of potential problems and help identify areas for investigation.

2.3. The Trust Mortality Review policy requires that all inpatient deaths be reviewed within 8 weeks of the death occurring. All deaths have a Level 1 review.

2.4. The aim is for all Level 1 mortality reviews to be completed by a Consultant independent of the case however with the current capacity constraints this is not possible in all cases. To mitigate this 25% of Level 1 reviews are selected at random for a Level 2 review and all (100%) of deaths undergo scrutiny from the Medical Examiner’s office.

2.5. If there are any concerns identified, a comprehensive Level 2 review is completed involving one or more consultants not directly involved in the patient’s care. A structured review, completed by a trained reviewer who was

not directly involved in the patient's care, is required if the case complies with one of the mandated criteria.

2.6. Each Division maintains a log of actions from mortality reviews and monitors progress by their clinical units. The clinical units are responsible for disseminating learning and implementing the actions identified.

2.7. The Divisions provide updates on actions in the monthly quality reports to the Clinical Governance Committee (CGC). The Divisions also provide updates to the Mortality Review Group (MRG) on the previous quarter's actions as part of the next quarter's mortality report. The Mortality Review Group reports to the Clinical Improvement Committee.

3. Mortality reviews 2021/22

During 2021/22 there were 2647 inpatient deaths reported at OUH with 2583 (98%) of cases reviewed within 8 weeks.

Table 1: Number of mortality reviews 2021/22

Total deaths	Total reviews (L1, L2 or SJR)	% deaths not reviewed within 8 weeks
2647	2583 (98%)	64 (2%)

3.1. All deaths involving COVID-19 are reviewed to confirm if inclusion in the nosocomial[1] SIRI is required.

3.2. All deaths during Quarter 4 have been retrospectively reviewed.

3.3. Divisions with deaths which were not reviewed (64) within 8 weeks have been requested to complete a Level 1 screening review and compliance is monitored via the monthly Mortality Review Group meeting.

3.4. A breakdown of deaths by ethnicity is included in this report.

3.5. The triggers for the structured reviews are listed in Table 2. The main triggers for structured reviews are patients with learning disabilities (40) and concerns from staff (30).

[1] acquired in a hospital, especially in reference to an infection.

Table 2: Criteria for structured mortality reviews for 2021/22

Criteria for structured review	Number of reviews
Learning disabilities	40
Concern from staff	30
Concern from family	5
Concern from family and from staff	2
Serious Incident Requiring Investigation (SIRI)	1
Concern from staff and Coroner's Inquest	3
Concern from ME and Coroner's Inquest	0

3.6. Each Division maintains a log of actions from mortality reviews and monitors progress by their clinical units and are responsible for dissemination of the learning and implementation of actions. The Divisions provide updates on actions in the monthly quality reports to the Clinical Governance Committee and provide updates to the Mortality Review Group (MRG) on the previous quarter's actions as part of the next quarter's mortality report.

3.7. All Structured Mortality Reviews for people with Learning Disabilities are presented at the monthly Mortality Review Group meeting.

3.8. During Quarter 3 of 2021/22, one patient death was judged more likely than not to have been due to problems in the care provided. This case related to a patient admitted with soft tissue infection due to a sacral pressure wound which progressed to sepsis, multi organ failure and death. Surgical debridement was undertaken after 10 days in hospital at a point where the patient was gravely ill and could not survive. This case was escalated to a serious incident requiring investigation (SIRI) following discussion at MRG. Learning from this investigation is included in this report.

4. Medical Examiner System

4.1. The current Medical Examiner (ME) system comprises 0.9 full-time equivalent (FTEs) Medical Examiners supported by the existing Bereavement Officers who have taken on the role of Medical Examiner Officers.

4.2. The purpose of the Medical Examiner system is to provide greater safeguards for the public by ensuring proper scrutiny of all non-Coronial deaths, ensuring appropriate direction of deaths to a Coroner, providing a better service for the bereaved, including an opportunity for them to raise any concerns to a doctor not involved in the care of the deceased, improving the quality of death certification, and improving the quality of mortality data.

4.3. The Medical Examiners have continued to scrutinise deaths within the Acute Trust during 2021-22. This additional scrutiny has revealed the high quality of

clinical notes on EPR. Feedback from the bereaved families during telephone discussions generally reflect a high degree of satisfaction for the care provided in the Trust. Any concerns raised by MEs, or the bereaved families are fed back through Learning from Deaths, but many of these incidents had already been recognised and referred to the Trust's Patient Safety processes or to the complaint's teams.

4.4. Medical Examiners and Medical Examiner Officers work closely with the Regional ME, the National ME and the Coroner's Office. The service will be extended to scrutinise deaths within the local hospices and in the community setting from the statutory implementation date (01/04/2023).

4.5. The Medical Examiners (MEs) have monthly meetings to review progress and discuss cases. The feedback received by the MEs from bereaved families as to how they are informed of the deaths of their relatives has led to discussion and review of processes clinically. The ME shares their comments with the Clinical Outcomes Manager who then shares feedback with the relevant Division. The Division will then share with relevant ward staff and once investigated, contact the bereaved with the outcome.

4.6. The feedback received by the MEs from the bereaved families is shared promptly with the ward teams. This has raised the profile of the ME system within the Trust and clinical teams are recognising and appreciating the ME role as part of the developing Bereavement process.

5. Examples of learning and actions from mortality reviews 2021/22

5.1. This section of the report provides examples of the learning and actions identified from mortality reviews in 2021/22 in the following categories:

- Treatment
- Communication
- Governance

Treatment:

5.2. Work continues to improve oxygen prescribing compliance. Safety messages in relation to this have been shared across the organisation.

5.3. The importance of accurate DNACPR endorsement on EPR has been highlighted, particularly when a patient is readmitted. A Safety message was issued in response to this.

5.4. A reminder to staff, including Acute General Medicine clinicians, to calculate CURB scores for community acquired pneumonia and use of the micro guide to support treatment has been circulated. A CQUIN for 22/23 focusing on this is also in progress.

5.5. Risks vs benefits of performing surgery on patients who are deemed to be high risk (e.g. significant co-morbidities or end-of-life care). A focus on Montgomery consent involving the patient and family in decision making was recognised.

5.6. Important messages such as DNACPR status cannot be added to the patient banner in the Medisoft® system (used by the Ophthalmology Directorate). This has been highlighted to the teams involved and a solution is currently in progress.

5.7. NOTSSCaN – Paediatrics: Learning points focused on managing parental expectations where prognosis is poor and ensuring that Organ Donation is offered where relevant. The need to engage Community teams and DGH teams when a patient is known to them and the need for high quality documentation were shared. Earlier consideration of referral for palliative care input from Helen and Douglas House Hospice was recognised as important, as this service is not available within the Trust. As a result, the pathway for referral to Helen and Douglas House for children of all ages has been updated and widely disseminated.

5.8. The National Bereavement Care Pathway (for pregnancy and baby loss) has now been formally adopted by Maternity. This will better delineate the needs of support for families following Neonatal and small Infant death. It is hoped that this will be the springboard for future development of this much-needed service across Children's. Work is underway to audit current practice against this standard.

5.9. Ensure VTE assessments are completed and reviewed according to trust guidelines. Compliance is monitored monthly via the Clinical Governance Committee (CGC). Each clinical area is responsible for reviewing compliance, with issues raised at local governance meetings and the implementation of an action plan if required. Specific teaching relating to completion has recently been completed in Acute General Medicine.

Communication:

5.10. Importance of communication and updating of families when a patient's clinical status changes: Reminders have been disseminated via Divisional governance meetings and safety huddles to clinical teams regarding the importance of updating family members, regardless of the time of day, if a patient deteriorates and is unlikely to survive.

5.11. The importance of accurate recording-keeping using EPR has been highlighted. It was recognised that 'copying and pasting' from previous entries had the potential to create confusion if the clinical picture had changed when new observations or results were taken from the patient. This

has been actioned via safety huddles and organisation level safety messages.

5.12. Improved documentation of discussions with patients about their wishes regarding care and risk of operations has been highlighted in SUWON Division.

5.13. The challenge of managing complex patients across multiple teams has been highlighted, particularly when the managing team is relying on specialist advice that is obtained from a variety of people. The importance of the effective use of electronic systems was also highlighted in these situations.

5.14. The importance of team debriefs following cardiac arrests in complex cases is recognised and the rollout of debriefs is now being actioned.

5.15. Earlier referral to the palliative care team to optimise pain control was highlighted by the spinal team following the completion of a structured mortality review. The palliative care lead has met with ward staff in several areas to raise the importance of and progress this.

5.16. Patients with known respiratory disease should have early referrals and review by respiratory medicine. Use of the EPR Consultant pool has been highlighted and is widely used.

Governance:

5.17. An issue has been raised with the current use of systems for completing mortality reviews. When an electronic level 1 review is completed, and further review (Level 2 or SJR) is required the system does not automatically flag these cases. Divisional Governance teams have been reminded of the importance of checking the weekly level 1 report to identify deaths requiring further review. This has been monitored at the monthly MRG meetings and no concerns have been raised by the divisional teams.

5.18. ICU compliance with level 1 reviews on EPR had improved in quarter 4 but a significant number remained uncompleted. A new process has been put in place aimed at improving future level 1 compliance. Deaths in ICU are also triaged for level 2 review.

5.19. A resource for supporting OUH professional staff who themselves have suffered baby or child loss has been developed and shared.

5.20. The need for increasing awareness of the difference between a learning disability and a learning difficulty was highlighted in SUWON Division. Learning will be shared at divisional governance and disseminated accordingly.

5.21. The vital role of passports for patients with Learning Disabilities has been highlighted at Mortality Review Group as a source of guidance

regarding support structures important to the individual. The passport provides a snapshot of the patient to underpin assessment of normal behaviours and coping mechanisms, as well as guidance regarding appropriate interventions. The July 2021 quarterly governance newsletter (SHINE) produced and shared across the Trust included an article on passports.

5.22. SUWON Division highlighted the importance of ensuring staff remain up to date on Trust guidance and policies. This is monitored at Divisional level; any identified issues are flagged to relevant managers and education leads.

5.23. Notable practice was identified by the Oxfordshire Assistant Coroner during the inquest of an orthopaedic patient who died following aspiration during induction of anaesthesia. The Assistant Coroner was complimentary about the extent of assessment and discussion with the patient both by surgeons and anaesthetic team about the high risks of the procedure and that it had been the patient's clear wish to proceed with the procedure in a planned manner rather than to operate in an emergency. The Assistant Coroner asked that her thanks be passed onto the teams who had to deal with a difficult and distressing sudden deterioration.

Focused analysis

5.24. During 2021/22 the following deeper analysis into specific areas of mortality was conducted and reported as part of the quarterly learning from deaths reports:

- Quarter 1: a further analysis of deaths involving pneumonia.
- Quarters 2 and 4: a focus on structured reviews completed during the period occurred.
- Quarter 3: a thematic analysis of past Dr Foster alerts and learning occurred.

5.25. These reviews demonstrated excellent care and provided assurance that no further deaths were judged more likely than not to have been due to problems in the care provided.

5.26. Background, analysis, and findings of these reviews can be found in the quarterly learning from death reports here - Board meetings and papers - Oxford University Hospitals (ouh.nhs.uk)

6. Serious Incident Requiring Investigations (SIRIs) with a related death

6.1. All SIRI related deaths are presented to MRG by the Lead Investigator upon completion.

6.2. During 2021/22, there were 20 SIRIs declared involving patients who died.

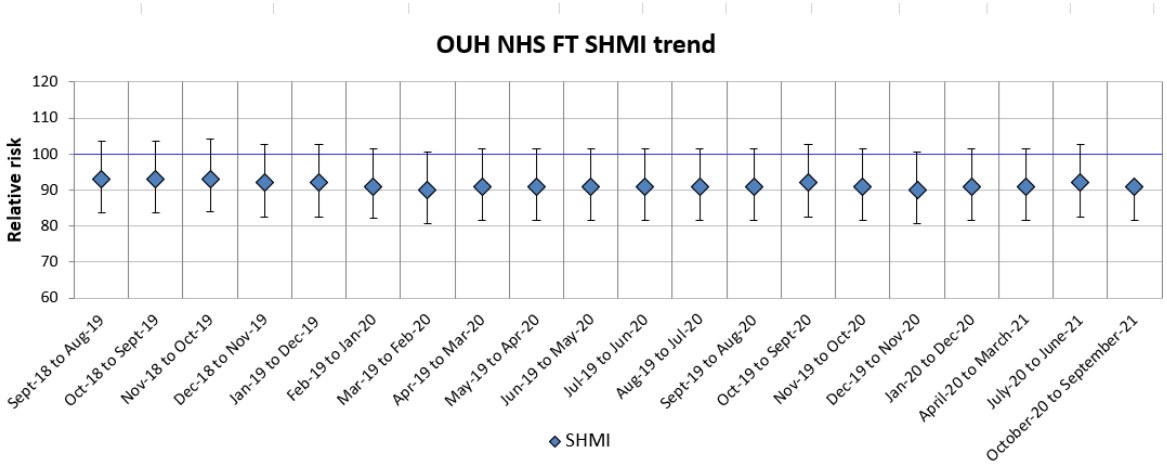
6.3. In accordance with national guidance, a structured mortality review is completed in cases of SIRIs involving a death. The learning points and actions are included in section 5 of this report. During 2021/22, one patient death was judged more likely than not to have been due to problems in the care provided.

7. Summary Hospital-level Mortality Indicator (SHMI) and Hospital Standardised Mortality Ratio (HSMR)

7.1. There have been no negative mortality outliers reported for OUH from the CQC or the Dr Foster Unit OUH level HSMR at Imperial College during 2021/22.

7.2. The SHMI for the data period 2021/22 is 0.92. This is rated 'as expected.' Chart 1 depicts the SHMI trend. The SHMI has remained rated 'as expected.'

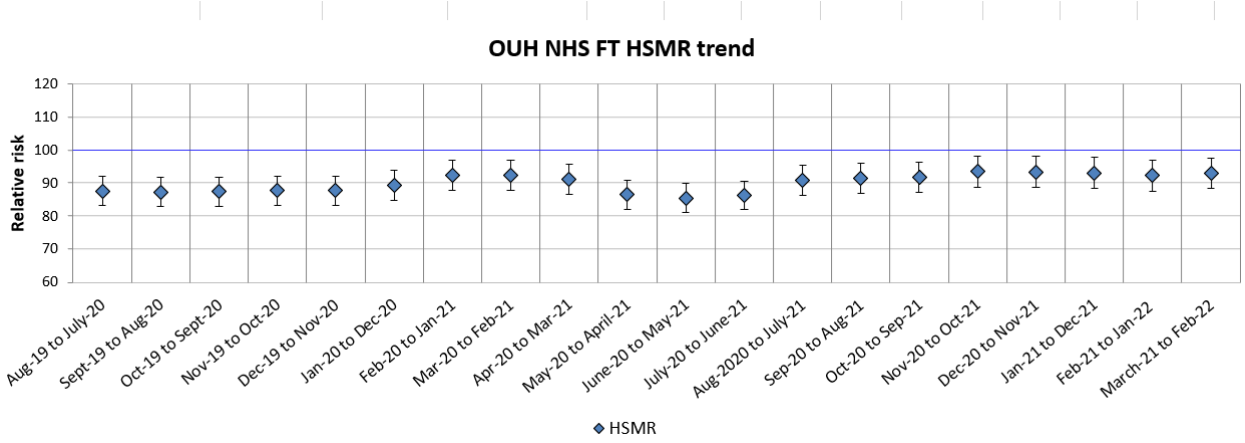
Chart 1: SHMI trend (Presented with a baseline of 100 to enable comparison to the HSMR)



7.3. The HSMR is 93 for the data period March 2021 to February 2022. This is rated as 'lower than expected.' Chart 2 depicts the HSMR trend. The HSMR has remained rated 'lower than expected.'

7.4. COVID-19 activity is excluded from the SHMI. NHS Digital have advised that the SHMI is not designed for this type of pandemic activity and the statistical modelling used to calculate the SHMI may not be as robust if such activity were included. Activity that is being coded as COVID-19, and therefore excluded, is monitored in a new contextual indicator 'Percentage of provider spells with COVID-19 coding'.

Chart 2: HSMR trend & Shelford Group comparison



The Shelford Group *

Title	CUSUM	Vol	Obs	Exp	%	Relative risk
SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	4 1	86390	1960	1911.2	2.3	102.5
UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	20 3	115350	3820	3726.2	3.3	102.5
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	4	72575	1515	1575.7	2.1	96.2
OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	4	63578	2049	2203.5	3.2	**93.0**
KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	11	55290	1780	1928.4	3.2	**92.3**
MANCHESTER UNIVERSITY NHS FOUNDATION TRUST	43	93270	2435	2888.7	2.6	**84.3**
IMPERIAL COLLEGE HEALTHCARE NHS TRUST	48	62935	1335	1817.8	2.1	**73.4**
CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	37	57475	1090	1501.6	1.9	**72.6**
GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	31	51010	815	1122.9	1.6	**72.6**
UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	31	49960	605	880.9	1.2	**68.7**

HSMR Cumulative Sum (CUSUM) Charts

7.1. The major aims of the CUSUM control charts are to keep the process on target. The “cumulative sum” in this type of chart is the sum of the deviations of individual sample results or subgroup averages from the target.

7.2. A red bell indicates a negative alert has been identified for the diagnosis group during the reporting period selected.

7.3. A green bell indicates a positive alert has been identified for the diagnosis group during the reporting period selected.

Table 1 – HSMR diagnoses with the highest numbers of deaths

Relative risk & CUSUM alerts				
Title	CUSUM	Vol	Obs	Exp
All Diagnoses	10 8	192663	2653	2877.9
HSMR (56 diagnosis groups)	4	63677	2059	2183.0
Pneumonia	4	2578	249	325.0
Acute cerebrovascular disease		1374	212	202.3
Septicemia (except in labour)		771	138	135.9
Viral infection	14	2978	98	192.9
Congestive heart failure, nonhypertensive	3	1400	88	125.0
Secondary malignancies	2	1129	82	51.2
Aspiration pneumonitis, food/vomitus		327	81	88.1
Intracranial injury		661	66	70.3
Cancer of bronchus, lung	1	642	66	49.3
Acute myocardial infarction		1101	65	62.5

Table 2 – HSMR diagnoses with the lowest numbers of deaths

Relative risk & CUSUM alerts				
Title	CUSUM	Vol	Obs	Exp
All Diagnoses	10 8	192663	2653	2877.9
Other diseases of bladder and urethra		534	1	0.9
Other diseases of veins and lymphatics		162	1	1.1
Paralysis		321	1	1.9
Poisoning by nonmedicinal substances		69	1	0.7
Schizophrenia and related disorders		22	1	0.3
Skull and face fractures		366	1	1.6
Spinal cord injury		13	1	2.5
Systemic lupus erythematosus and connective tissue disorders		239	1	1.2
Thyroid disorders		243	1	0.5
Tuberculosis		31	1	2.2

7.4. The Trust HSMR is benchmarked:

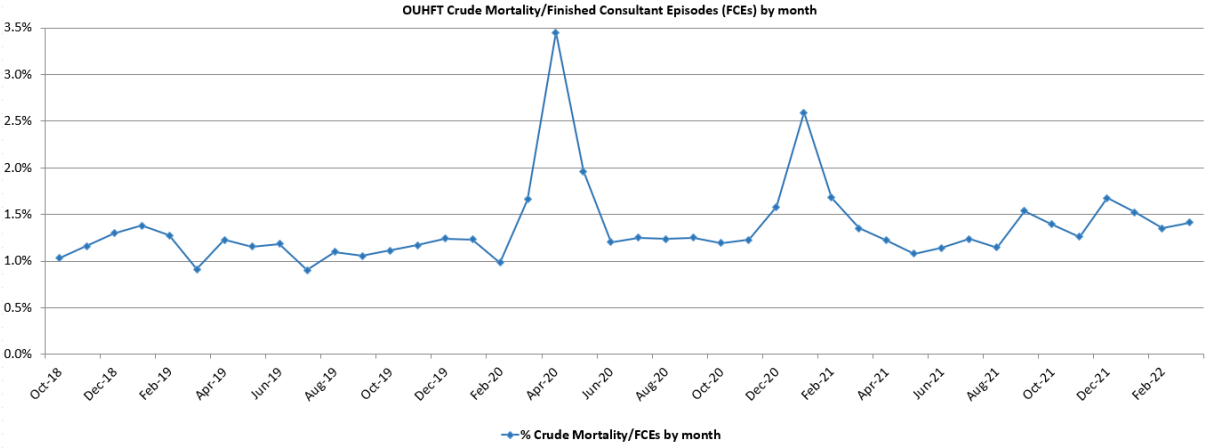
- 4th of 8 acute non-specialist peers
- 2nd of 7 peers with on-site hospice
- 4th of 10 teaching trusts with similar volume

Crude Mortality

Crude mortality gives a contemporaneous but not risk-adjusted view of mortality across OUH. Chart 3 presents the crude mortality for OUH between October 2018 and February 2022. For the majority of 2021/22 Crude Mortality by Finished Consultant Episode has been between 1-1.5% with two small peaks at

just over 1.5% in September 2021 and January 2022. Excluding the two main Covid-19 peaks, the 2021/22 trend is similar to previous years.

Chart 3: Crude Mortality rate by Finished Consultant Episodes (FCEs)



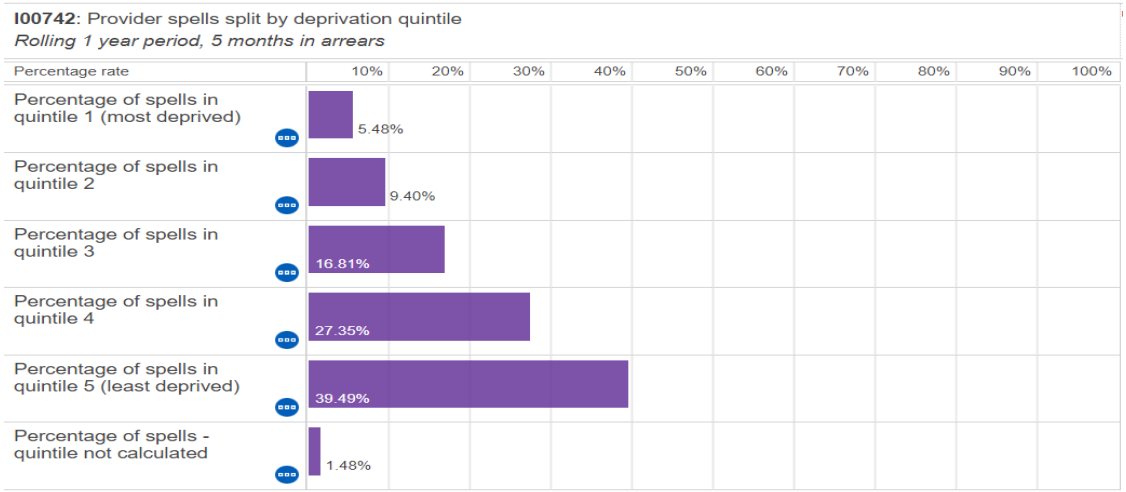
SHMI spells and deaths by deprivation

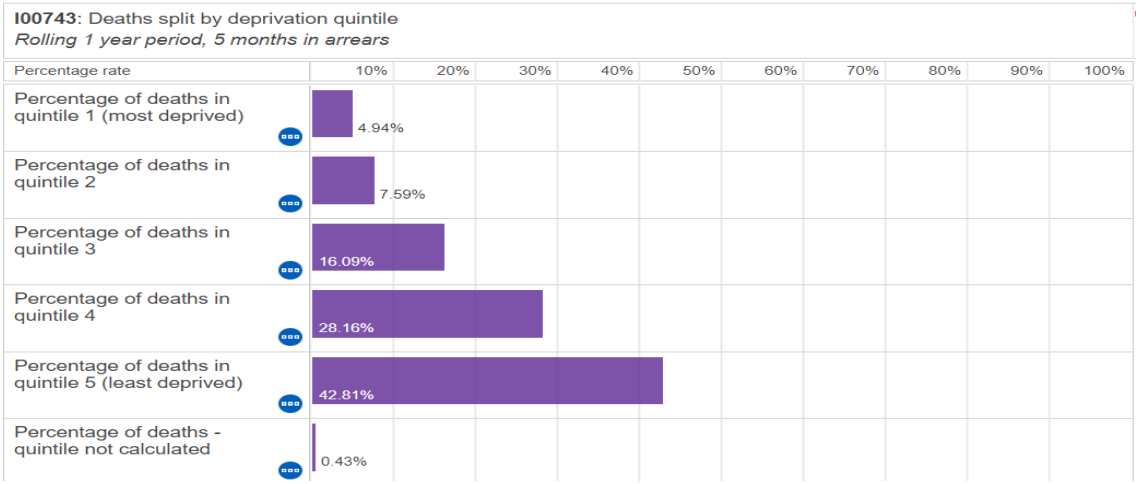
7.5. NHS Digital reference the same spell level information which was used to calculate the SHMI to report the percentage rates of deaths under each social deprivation quintile.

7.6. Deprivation quintiles are calculated using the Index of Multiple Deprivation (IMD) Overall Rank field in the Hospital Episodes Statistics (HES) dataset which is based on a weighted combination of factors such as income; employment; health deprivation and disability; education, skills, and training; barriers to housing and services; crime and living environment.

7.7. Chart 5 displays the percentage breakdown of spells and deaths by deprivation quintile. There remains a higher percentage of deaths in the least deprived group (quintile 5) relative to the percentage of spells attributed to those quintiles in line with the 2020/21 annual report.

Chart 5: % SHMI spells and deaths by deprivation quintile





During 2021/22:

7.8. Neurosciences, Orthopaedics, Trauma, Specialist Surgery, Children's, and Neonatology Division reported that 297 patients died from a total of 61,051 discharges. This represents an increase in mortality (229) and an increase in the number of discharges (46,320) compared to 20/21 financial year.

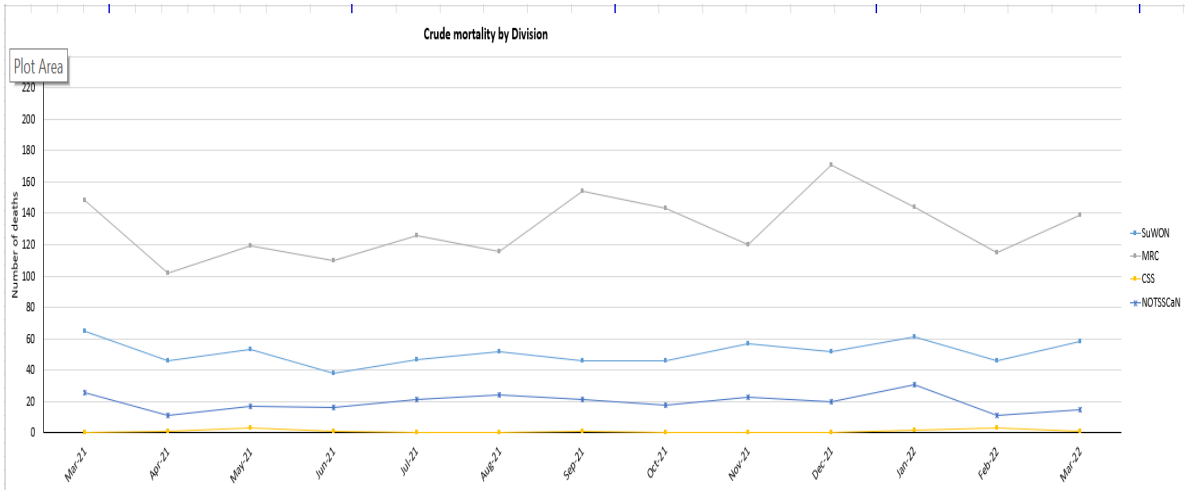
7.9. Medical Rehabilitation and Cardiac Division reported that 1590 patients died from a total of 63,668 discharges. This represents a reduction in mortality (1672) and an increase in the number of discharges (54,501) compared to 20/21.

7.10. Surgery, Women's, and Oncology Division reported that 695 patients died from a total of 72,452 discharges. This represents an increase in mortality (603) and an increase in the number of discharges (58,896) compared to 20/21.

7.11. Clinical Support Services Division reported 25 deaths in the Critical Care Units from a total of 2,258 discharges. This represents a reduction in mortality (128) and an increase in the number of discharges (1,584) compared to 20/21.

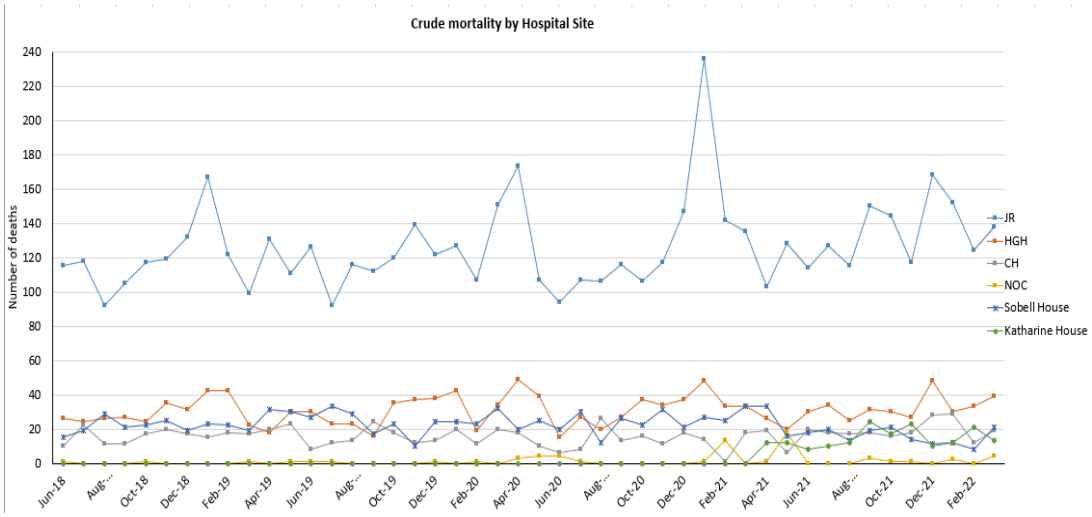
7.12. Chart 5 presents the crude mortality by Division.

Chart 5: Crude Mortality by Division



7.13. Chart 6 depicts the crude mortality by hospital site. Most deaths occur at the John Radcliffe Hospital which has the highest activity.

Chart 6: Crude Mortality by Site



8. Corporate Risk Register and related Mortality risks

8.1. Relevant mortality risks from the Corporate Risk Register can be seen below:

- Failure to care for patients correctly across providers at the right place at the right time.
- Trust-wide loss of IT infrastructure and systems (e.g., from Cyber-attack, loss of services etc).
- Failing to respond to the results of diagnostic tests.
- Patients harmed because of difficulty finding information across two different systems (Paper and digital).

- Potential harm to patients, staff, and the public from nosocomial COVID-19 exposure.
- Lack of capacity to meet the demand for patients waiting 52 weeks or longer.
- Ability to achieve the 85% of patients treated within 62 days of cancer diagnose across all tumour sites.

9. Mortality Review Governance

9.1. A quarterly summary of Directorate and Divisional mortality reports from their respective mortality and morbidity reviews are presented to the monthly Mortality Review Group (MRG) Chaired by the Director of Safety and Effectiveness.

9.2. Monthly MRG summary reports are then presented to the Clinical Improvement Committee (CIC) which is Co-Chaired by the Director of Clinical Improvement and a Divisional Nurse.

9.3. CIC reports to Clinical Governance Committee (CGC), Chaired by the Chief Medical Officer or the Chief Nursing Officer.

9.4. CGC reports via Trust Management Executive to the Integrated Assurance Committee (sub-committee of the Trust Board).

10. Conclusion

10.1. In accordance with national mortality guidance, the Trust has implemented a revised mortality review policy and implements structured mortality reviews. This paper summarises the learning identified in the mortality reviews completed during 2021/22.

10.2. The Medical Examiner role is well established, with good working process, governance and continues to see an increase in the quantity of reviews undertaken.

11 Recommendations

11.1 The Public Trust Board is asked to note the content of this report for information.