Oxford University Hospitals
NHS Foundation Trust

Cover Sheet

Public Trust Board Meeting: Wednesday 10 May 2023

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Title:	**Learning from Deaths Report – Quarter Q3 2022/23**

Status:	**For Information**
History:	**This is a quarterly paper to the Trust Board**

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Confidential:	**No**
Key Purpose:	**Assurance**

Executive Summary

1. This paper summarises the key learning identified in the mortality reviews completed for Quarter 3 of 2022/23,performance for the latest available Dr Foster Intelligence data and provides assurance that any highlighted concerns are investigated thoroughly, and appropriate action is taken.
2. Investigating mortality, and reporting data, enable identification of further ways to improve patient outcomes and safety.
3. During Quarter 3 of 2022/23 there were 759 inpatient deaths reported at OUH. Compliance with mortality reviews as per the agreed policy is presented in Table 1. There were 714 (95%) cases reviewed within 8 weeks. Of these reviews, there were 321 (42%) level 2 and structured mortality reviews completed. The remaining 45 reviews have been escalated to the divisions with compliance reported monthly to the mortality review group.
4. No death occurring during Quarter 3 was deemed to be 'avoidable'.
5. A detailed analysis of completed structured reviews during the quarter is included in this report.
6. The SHMI for the data period October 2021 to September 2022 is 0.96. This is banded 'as expected' based on NHS Digital's 95% control limits, adjusted for over-dispersion (0.89 – 1.12).
7. The Trust's HSMR is 94.5 for December 2021 to November 2022. The HSMR has decreased and remains banded as 'lower than expected' (95% CL 90.9 – 99). The HSMR excluding both Hospices is 85.4.

Recommendations

The Public Trust Board is asked to receive this paper for information.

Contents

Learning from Deaths Report – Quarter Q3 2022/23

1. Purpose

1.1. This paper summarises the key learning identified in the mortality reviews completed for Quarter 3 of 2022/23.

1.2. This report provides a quarterly overview of Trust-level mortality data for the period of Quarter 3: October 2022 to December 2022, performance for the latest available Dr Foster Intelligence data and assurance that any highlighted concerns are investigated thoroughly, and appropriate action is taken.

2. Background and Policy

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:

2.1.1. Preventing people from dying prematurely.

2.1.2. 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 national criteria - NHS England » Learning from deaths in the NHS.

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. Mortality related actions are reported quarterly to MRG and included in Divisional quality reports presented to the Clinical Governance Committee.

2.8. 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 during Quarter 3 of 2022/23

Table 1: Number of mortality reviews completed during Quarter 3 of 2022/23:

Total deaths	Total reviews (L1, L2 or SJR)	Deaths not reviewed within 8 weeks
759	714	45

3.1 During Quarter 3 of 2022/23 there were 759 inpatient deaths reported at OUH. Compliance with mortality reviews as per the agreed policy is presented in Table 1. There were 714 (95%) cases reviewed within 8 weeks. Of these reviews, there were 321 (42%) level 2 and structured mortality reviews completed. The remaining 45 trust wide reviews (18 in SUWON) have been escalated to the divisions with compliance reported monthly to the mortality review group. Enhanced support and guidance regarding death documentation has been provided to Neurosciences department due to low compliance. Trust wide safety messages regarding death documentation are also planned by the Medical Examiner's office imminently. This will improve the compliance with completion of electronic level 1 reviews. All outstanding cases from quarter 2 have now received a mortality review (level 1/level 2).

3.2 Trust wide, there were 13 structured reviews completed during Quarter 3 of 2022/23. The reasons for completing the structured review include individuals

with a learning disability, concerns raised by staff of families and concerns raised during the Medical Examiner scrutiny. Learning and recommendations from the completed structured reviews are included in this report.

3.3 During Quarter 3 of 2022/23, there were no patient deaths at the OUH judged more likely than not to have been due to problems in the care provided.

4. The Medical Examiner system

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

4.2. The MEs have been scrutinising deaths within the Acute Trust since June 2020. In quarter three (2022-23) so far 97% of deaths have been reviewed by the ME office with over 90% of acute trust deaths receiving a review by a Medical Examiner. This additional scrutiny has revealed the high quality of clinical notes on EPR. Feedback from the bereaved during telephone discussions reflect a generally high degree of satisfaction for the care provided in the Trust. Any concerns or compliments raised by MEs or the bereaved are fed back through the central Learning from Deaths email and then shared appropriately with clinical teams. Many of these incidents had already been recognised and referred to the Trust's Patient Safety processes or to PALS.

4.3. Medical Examiners and Medical Examiner Officers are 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 2023-24. Any issues identified with this extension into the community have been raised to the National Medical Examiner. There will be progress reports to the National ME office every quarter.

4.4. 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. Examples include escalation of reviews to trust level structured review/SIRIs and changes to death documentation processes.

4.5. The feedback received by the MEs has been 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 an independent part of the existing Bereavement system.

4.6. The opportunity for families to discuss the care their relative received with an ME has been positively received.

4.7. Planning is now underway to confirm a process for the scrutiny of deaths by the ME in the community.

4.8. The Lead Medical Examiner is meeting with external stakeholders ahead of the community roll out in 2023. Scrutiny of hospice deaths is established. Meetings with the local ICS and two neighbouring ME Offices are underway to allow introduction of the ME service to the Community. There is capacity among the MEs to start this with further recruitment of MEs and MEOs already under way.

5. Child death overview process

5.1. The statutory requirement to establish a panel that would review every child death in their local area has been in place since 2006 (section 14 of the Children Act 2004). These regulations were further developed in Working Together to Safeguard Children (2018).

5.2. The specific functions as laid down in the statutory guidance require the panel to review the available information of deaths of all children up to the age of 18 years. This includes the deaths of infants less than 28 days, including those born before viability, but not those who are stillborn or are terminated pregnancies within the law.

5.3. The Oxfordshire child death overview process (CDOP) is committed to the process of systematically reviewing all children's deaths, ensuring the child death review process is grounded in respect for the rights of children and their families and focuses, where possible, on preventing future child deaths.

5.4. The administration of the Oxfordshire CDOP is hosted by Oxfordshire Integrated Care Board (ICB) and is chaired by the Director of Quality and Lead Nurse from the ICB. The Designated Doctor for Child Death is a Consultant Paediatrician at OUH and is commissioned by the ICB to undertake this role.

5.5. Child mortality is discussed monthly at the mortality review group meeting. There were 22 child deaths in the OUH Quarter 3 2022-23, double the number in the previous quarter. There was one additional death of a neonate transferred from Newborn Care terminally to Helen and Douglas House for compassionate extubation. Age of death ranged from an extremely premature baby born at 19 weeks gestation with signs of life, to an adolescent aged 14 y 11 months.

5.6. All cases were reviewed in a multidisciplinary forum. Compliance with National Guidance for child death reporting and review continues at 100%. There were no concerns in care noted following the reviews in Q3 2022023.

5.7. Good practice was highlighted wherever noted and included many examples of coordinated palliative care and end of life planning. Full resuscitation was offered in accordance with parental wishes even in high-risk cases. There was evidence of good antenatal counselling in cases where congenital anomalies were present in Neonates who died shortly after birth.

5.8. One of the learning points highlighted that there were still occasions where involvement of the charity Helen and Douglas House could be activated earlier to support teams, parents and patient symptom management even when decisions are made on a short time scale. Continued education and reinforcement of this service is ongoing.

5.9. Communication with Community based and/or external Specialist teams when end of life decisions in Paediatric Critical Care (PCC) remains an ongoing objective.

5.10. The child deaths reviews have prompted an increased need to embed a psychology led processes aimed at staff who are impacted by child death. These meetings happen on regular basis and will be done virtually to ensure that everyone interested can attend. Work is still to be done to ensure effective use of psychologists available to support the teams.

5.11. New legislation has dictated that the Medical Examiner will now engage fully with all child deaths. This is a welcome augmentation of the Trust's responsibility to the bereaved family. Understanding the perspective of families who have lost a child will require close collaboration with experienced bedside clinicians and the team plan to outline an SOP going forward.

5.12. The Medical Examiner will work closely with the clinical teams to improve the sharing of information with families and professionals and address the urgent need for better triangulation of all baby and child clinical records through the EPR system. Feedback from the Medical Examiner

contact will be incorporated into learning how to better support bereaved families going forward.

6. Learning and actions from mortality reviews during Quarter 3 of 2022/23

6.1. The key learning points to emerge from mortality reviews undertaken during Quarter 3 were:

6.1.1. Early communication to the families when a patient is at the end of life remains has been recurring theme. 5th OUH End of Life Care Symposium as part of Dying Matters Week 2023 has been planned for 11 May 2023. The aim is to create an open culture in which we're comfortable talking about death, dying and grief as well as equipping professional with the knowledge and skills to improve the quality of all palliative and end of life care.

6.1.2. A poster has been created informing patients and carers of their right to an interpreter.

6.1.3. One of the reviews identified lack of clear policy available to staff re management of period post removal of central venous access device (CVAD). The practice development team at the NOC are making an education video on CVAD removal. The CVAD removal guidelines have been covered in the recent policy review. These are now on located on the intranet site of the Vascular Access Service as a separate document for ease**.**

6.1.4. Current practice of EOL medication (controlled drugs) availability over the weekends has been reviewed by the Ward sister, matron and pharmacist with agreed stock level for weekend.

6.1.5. Learning from neonatal death in Q2 22/23 has led to production of an escalation policy in the event of a discrepancy in CTG interpretation between clinicians, in order to support clinicians in identifying, escalating, and appropriately planning care for women with difficult to interpret CTG traces. Patient Safety Academy continue to support human factors training with focus on human factors discussion in teaching/at Intrapartum Shared Learning (ISL) forum: effective communication, escalation and overcoming institutional hierarchy.

6.1.6. The need for accurate EPR notes – the importance of not just 'cutting and pasting' and ensuring that the correct senior clinician's

name is entered at the top of ward round record. This was raised at the Clinical Improvement Committee (CIC) in October and work is now underway with the EPR team. This issue will also be raised at the next Clinical Governance Committee (CGC) meeting. A safety message relating to this was circulated 18/10/2022 (number 194).

6.1.7. The importance of completing cognitive screens has been highlighted. Compliance is often monitored via Divisional and Directorate governance meetings. Cognitive screen records cognitive frailty (delirium, dementia, and objective cognitive deficits (AMTS). The cognitive screen and nursing assessments together constitute a pragmatic but comprehensive geriatric assessment. Work is currently underway to create a frailty aggregate score to be automatically calculated in EPR using nursing and cognitive screen data. Improvements remain ongoing with further papers on progress to be presented at the Trust's Clinical Governance Committee.

6.1.8. Highlighting that child death reporting systems applies to all children from birth to 18 years of age including any adolescent on an adult ward (AICU, Neuro ICU, Maternity).

7. Patient safety incidents with an impact of death and subsequent SIRI investigations declared during Quarter 3

7.1 Fourteen incidents with an impact of death were declared as a Trust Level Serious Incident Requiring Investigation (SIRI) during Quarter 3 2022/23.

7.2 These concerned:

7.2.1 A patient who underwent a knee replacement procedure at a private provider deteriorated and died shortly after transfer to the OUH. Concerns with the care provided have been identified following completion of a structured mortality review.

7.2.2 An intra-uterine death was confirmed at 37 weeks' gestation. This incident is being reviewed by Healthcare Safety Investigation Branch (HSIB).

7.2.3 A postnatal mother died 43 days following the delivery and neonatal death of her baby at 35 weeks gestation. The Coroner has confirmed the medical cause of death as COVID-19 pneumonia.

7.2.4 An inpatient with a rupture of a complex aortic aneurysm returned to theatre and died intra-operatively.

7.2.5 A baby was born in poor condition and died. Deeper consideration of the mother's medical, social, and personal histories may have resulted in a different pathway, though this is unlikely to have altered the outcome.

7.2.6 A woman died by suicide 4 weeks post-natally.

7.2.7 A baby that presented to the emergency department by ambulance later died. This event is being investigated by the HSIB.

7.2.8 A patient on an outlying ward[1] died from an ST elevation myocardial infarction. There were opportunities to identify and treat this condition earlier in the patient pathway.

7.2.9 A patient died from sepsis and concerns relating to the timely administration of antibiotics have been identified.

7.2.10 A member of the public fell from a stairwell in the hospital and died.

7.2.11 A non-English speaking patient underwent an ERCP and subsequently developed pancreatitis and died. A relative was used to translate for the consent to this procedure.

7.2.12 An intrapartum stillbirth occurred at 39 weeks. This is being investigated by HSIB.

7.2.13 An intrauterine death incident has occurred, which HSIB agreed to investigate.

7.2.14 An investigation covering nosocomial COVID-19 infections confirmed as meeting SIRI criteria October-December 2022.

7.3 Any SIRI with an impact of death must be presented to MRG upon closure.

7.4 These investigations are currently in progress and any relevant learning will be included in section 6 of future learning from deaths reports.

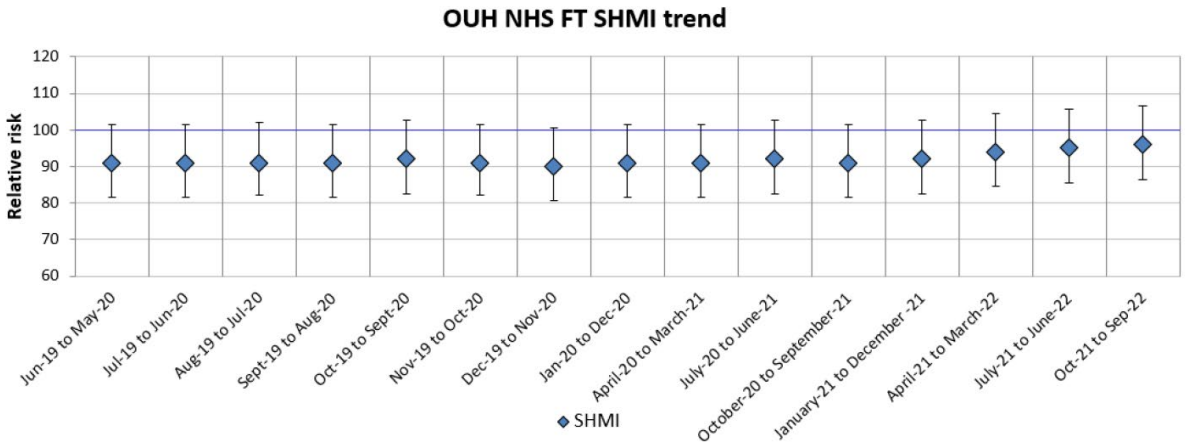
[1] Outlying refers to the process of transferring a patient to a clinical area outside of their speciality.

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

8.1. There have been no mortality outliers reported for OUH from the CQC or NHS Digital during Quarter 3.

8.2. The SHMI for the data period October 2021 to September 2022 is 0.96. This is banded 'as expected' based on NHS Digital's 95% control limits, adjusted for over-dispersion (0.89 – 1.12).

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



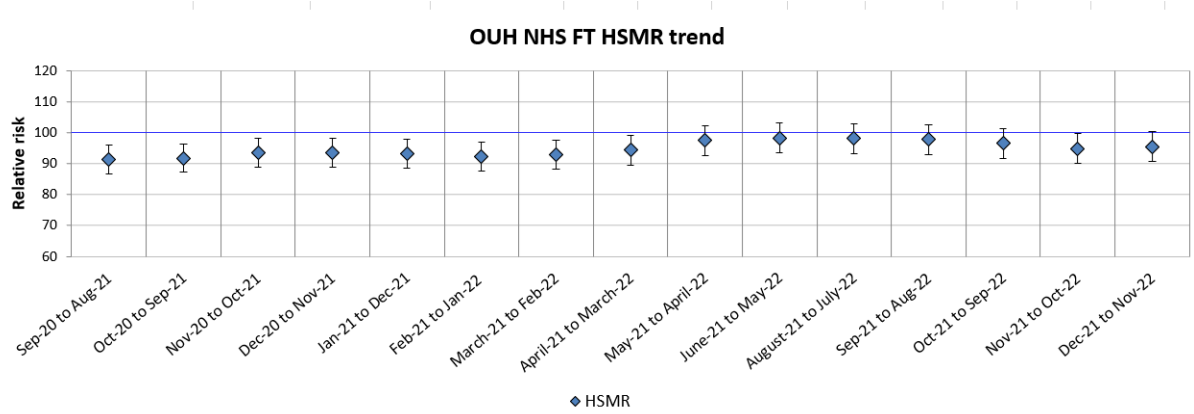
8.3. This chart shows the SHMI trend at various reporting points over between June 2019 and September 2022. The SHMI figure has consistently been between 0.9 and 0.96 which is within the 'as expected' band. As expected, means that the OUH is not an outlier.

8.4. The Trust's HSMR is 94.5 for December 2021 to November 2022. The HSMR has decreased and remains banded as 'lower than expected' (95% CL 90.9 – 99). The HSMR excluding both Hospices is 85.4.

8.5. Chart 2 depicts the HSMR trend. This chart demonstrates the trust has been classified 'as expected' or 'lower than expected' between September 2020 and November 2022. This again demonstrates the trust is not an outlier.

8.6. NHS Digital and Telstra have recommended the Trust level SHMI and HSMR data excludes both Katherine House Hospice and Sobell House Hospice due to issues with data adjustment. This has been approved and will be reflected in future learning from death reports for OUHFT.

Chart 2: HSMR trend & comparison with Teaching Hospitals:



Benchmarking peers Teaching Hospitals *

Title	CUSUM	Vol	Obs	Exp	%	Relative risk
SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	1 5	87455	2215	1915.4	2.5	115.6
NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	2 6	89335	2685	2335.7	3.0	115.0
LEEDS TEACHING HOSPITALS NHS TRUST	2 1	57105	2425	2144.5	4.2	113.1
NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	3 2	69460	2250	2062.9	3.2	109.1
BARTS HEALTH NHS TRUST	3 1	55335	2095	1999.8	3.8	104.8
KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	5	53090	1920	1992.4	3.6	96.4
OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	6	64973	2155	2281.4	3.3	94.5
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	4	75580	1560	1680.6	2.1	92.8
IMPERIAL COLLEGE HEALTHCARE NHS TRUST	38	67350	1445	1918.1	2.1	75.3
UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	20	52415	640	859.4	1.2	74.5

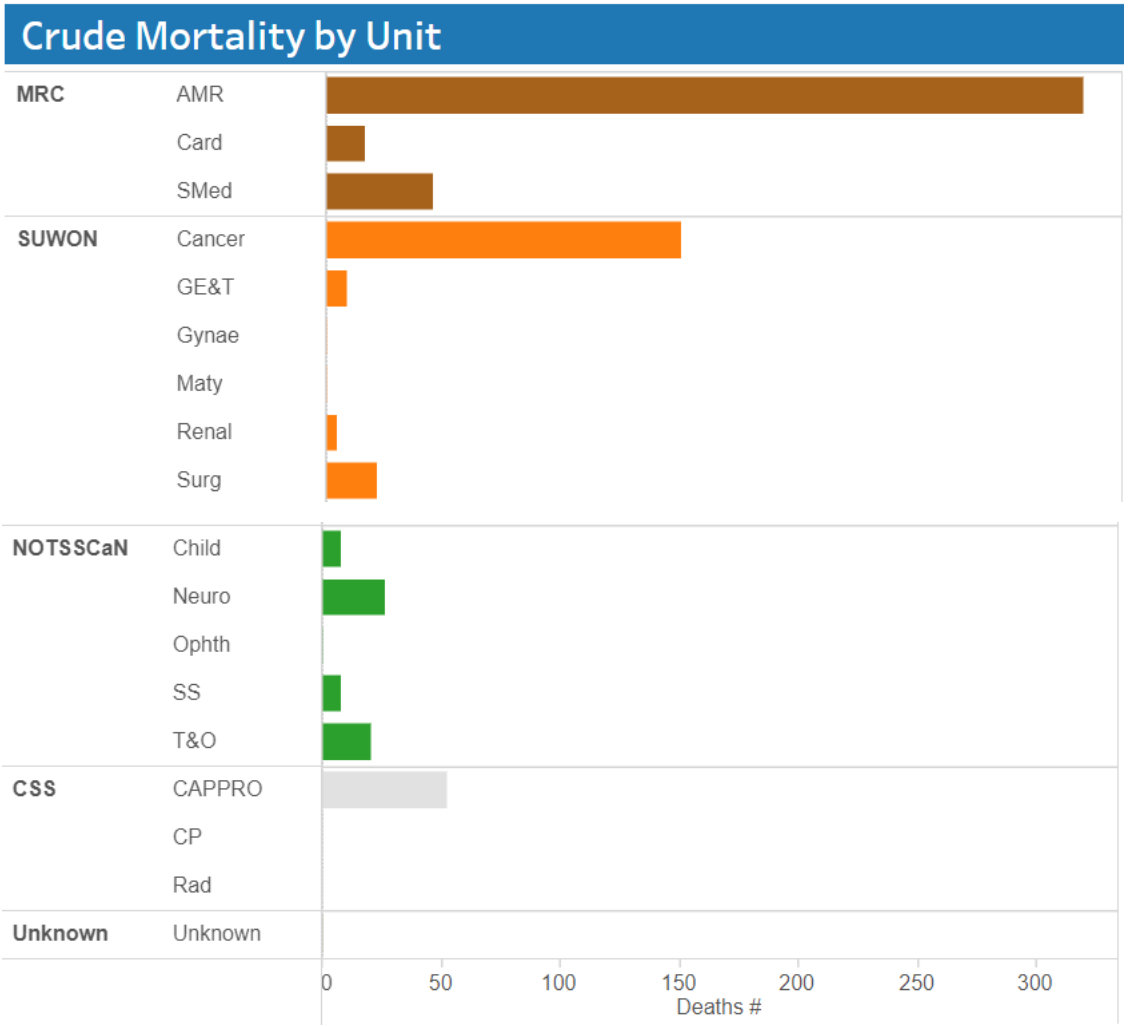
9. Analysis of mortality during Quarter 3:

9.1. 41% of deaths occurred in patients aged 60 to 79 years which is in line with previous quarters.

9.2. The highest number of deaths were admitted to the Acute Medicine and Rehabilitation (AMR) Directorate under the MRC Division (Chart 4). For comparison, section 10.2 includes information relating to total discharges vs mortality by Division.

9.3. There is no ethnicity data included in this report as it is in the process of being improved. This is part of a Quality Priority this year and once the data collection has improved, from containing a lot of 'unknown' this will be included and analysed in future Learning from Death reports.

Chart 4: Deaths by Directorate



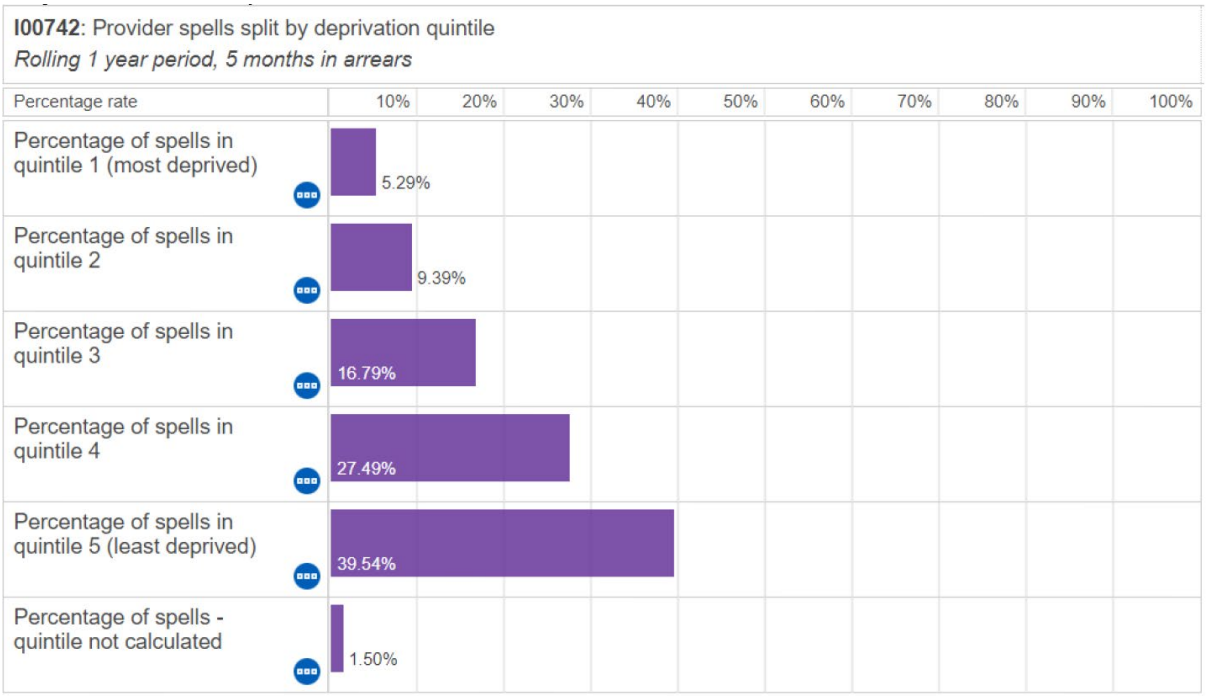
9.4. NHS Digital reference the same spell level information which was used to calculate the SHMI to report the percentage rates of deaths under each social deprivation quintile.

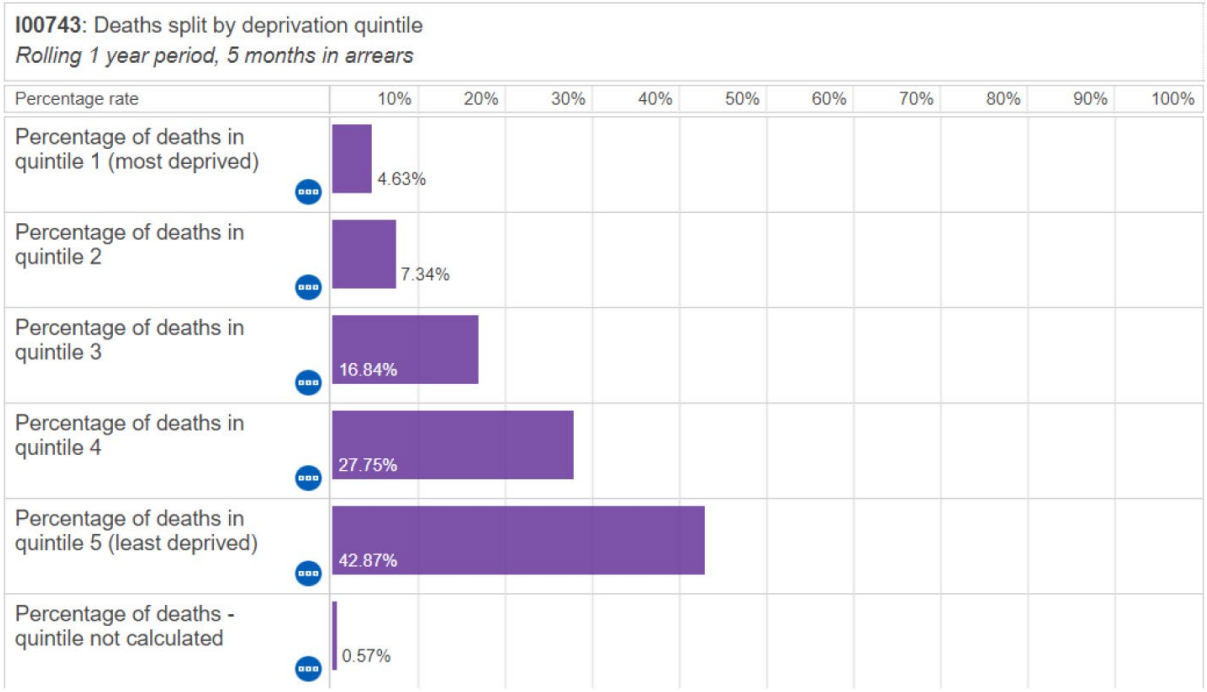
9.5. Deprivation quintiles are calculated using the Index of Multiple Deprivation (IMD) Overall Rank field in the Hospital Episodes Statistics (HES) dataset which is based on a weighted combination of factors such as income; employment; health deprivation and disability; education, skills, and training;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

9.6. Chart 5 displays the percentage breakdown of spells and deaths by deprivation quintile. There is a marginally higher percentage of deaths in

quintiles 4 and 5 relative to the percentage of spells attributed to those quintiles.

Chart 5: % SHMI spells and deaths by deprivation quintile

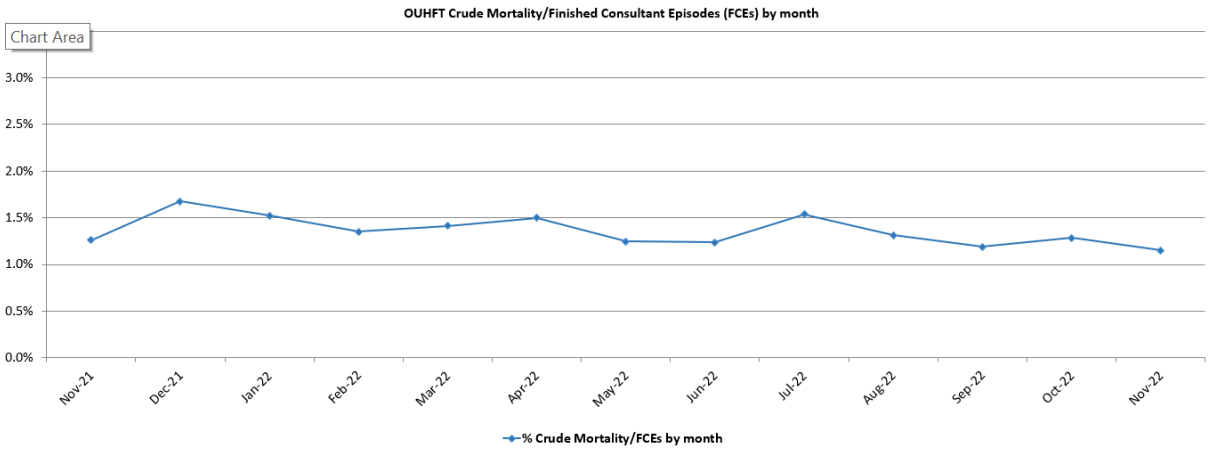




10. Crude Mortality

10.1. Crude mortality gives a contemporaneous, but not risk-adjusted, view of mortality across OUH.

Chart 6: Crude mortality rate by Finished Consultant Episodes (FCEs)



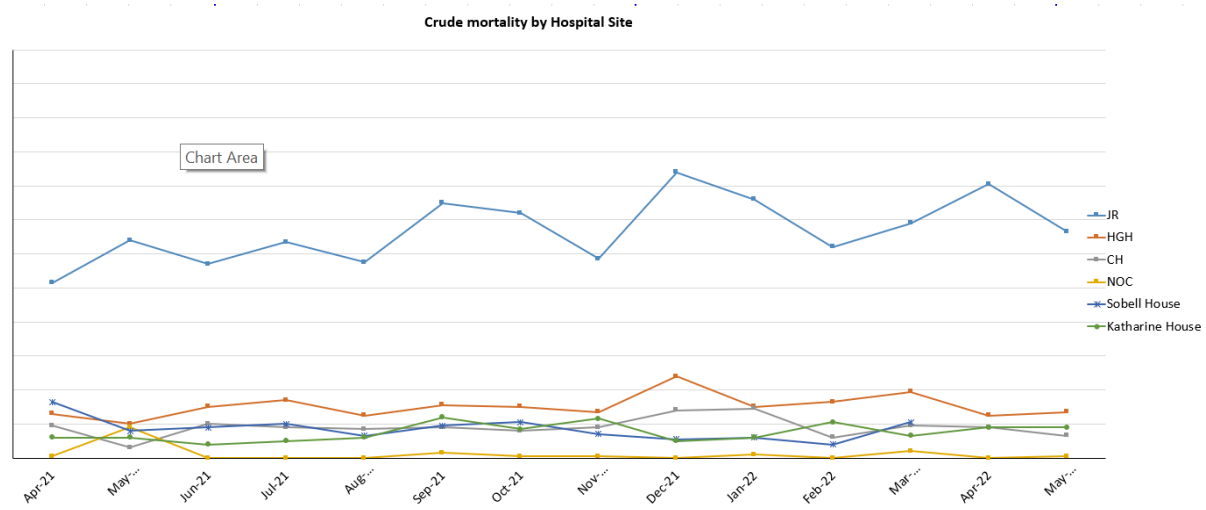
10.2. During Quarter 3 of 2022/23:

Division	No of deaths in Q3 22/23	Total Discharges
Neurosciences, Orthopaedics, Trauma, Specialist Surgery, Children's, and Neonatology Division	71	15,896
Medical Rehabilitation and Cardiac Division	437	16,656
Surgery, Women's, and Oncology Division	186	18,622
Clinical Support Services Division in the Critical Care Units	44	665

10.2.1. These figures are in line with previous reporting quarters.

10.2.2. Chart 7 depicts the crude mortality by hospital site. Most deaths occur at the John Radcliffe Hospital which has the highest activity.

Chart 7: Crude mortality by Site



11. Corporate Risk Register and related Mortality risks

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

11.1.1. Failure to care for patients correctly across providers at the right place at the right time.

11.1.2. Trust-wide loss of IT infrastructure and systems (e.g., from Cyber-attack, loss of services etc).

11.1.3. Failing to respond to the results of diagnostic tests.

11.1.4. Patients harmed because of difficulty finding information across two different systems (Paper and digital).

11.1.5. Potential harm to patients, staff, and the public from nosocomial COVID-19 exposure.

11.1.6. Lack of capacity to meet the demand for patients waiting 52 weeks or longer.

11.1.7. Ability to achieve the 85% of patients treated within 62 days of cancer diagnose across all tumour sites.

12. Mortality Review Governance

12.1. 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 Deputy Chief Medical Officer.

12.2. 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.

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

12.4. CGC reports via Trust Management Executive to the Integrated Assurance Committee (subcommittee of the Trust Board).

13. Recommendations

13.1. The Public Trust Board is asked to receive this paper for information.

Appendix 1 - Key differences between the SHMI and HSMR

The Trust references two mortality indicators: the SHMI, which is produced by NHS Digital, and the HSMR produced by Dr Foster Intelligence.

Both are standardised mortality indicators, expressed as a ratio of the observed number of deaths compared to the expected number of deaths adjusted for the characteristics of patients treated at a Trust.

While both mortality indicators use slightly different methodology to arrive at the indicator value; both aim to provide a risk adjusted comparison to a national benchmark (1 for SHMI or 100 for HSMR) to ascertain whether a trust's mortality is 'as expected', 'lower than expected' or 'higher than expected'.

Table 5: Key differences between the SHMI and HSMR

Indicator	**Summary Hospital-level Mortality Indicator (SHMI)**	**Hospital Standardised Mortality Ratio (HSMR)**
Published by	NHS Digital	Dr Foster Intelligence
Publication frequency	Monthly	Monthly
Data period to calculate indicator value	Rolling 12-month period for each release, approximately five months in arrears.	Provider-selected period, up to three months in arrears
Coverage	Deaths occurring in hospital or within 30 days of discharge. All diagnosis groups excluding stillbirths. Day cases and regular attenders are excluded.	In-hospital deaths for 56 selected diagnosis groups that accounts for 80% of in-hospital mortality. Regular attenders are excluded.
Assignment of deaths	Deaths that happen post transfer count against the transfer hospital (acute non-specialist trusts only).	Includes deaths that occur post transfer to another hospital (superspell effect).
Palliative Care	Not adjusted for in the model.	Adjusted for in the model.
Casemix adjustment	8 factors: diagnosis, age, sex, method of admission, Charlson comorbidity score, month of admission, year, birth weight (for individuals aged <1 year in perinatal diagnosis group).	12 factors: admission type, age, year of discharge, deprivation, diagnosis subgroup, sex, Charlson comorbidity score, emergency admissions in last comorbidity score, emergency admissions in last 12 months, palliative care, month of admission, source of admission, interaction between age on admission group and comorbidity admission group.