

### **Cover Sheet**

# Public Trust Board Meeting: Wednesday 13 July 2022

### TB2022.061

Title: Learning from deaths report – Quarter Q4 2021-22

Status: For Information

History: This is a quarterly paper to the Trust Board

**Board Lead: Interim Chief Medical Officer** 

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Confidential: No

**Key Purpose: Assurance** 

### **Executive Summary**

- This paper summarises the key learning identified in the mortality reviews completed for Quarter 4 of 2021/22 and 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 4 of 2021/22 there were 684 inpatient deaths reported at OUH. 98% (672) cases were reviewed within 8 weeks. Of these reviews, there were 320 (47%) comprehensive Level 2 reviews and 13 (2%) structured mortality reviews completed.
- 4. All COVID-19 related deaths are subjected to a Level 1 screening mortality review. There have been no COVID-19 related deaths judged more likely than not to have been due to problems in the care provided.
- 5. No death occurring during Quarter 4 was deemed to be 'avoidable'.
- 6. A detailed analysis of completed structured reviews during the quarter is included in this report.
- 7. The Summary Hospital-level Mortality Indicator (SHMI) for the data period October 2020 to September 2021 is 0.91. This is rated 'as expected.' The Hospital Standardised Mortality Ratio (HSMR) is 93 for the data period March 2021 to February 2022 and remains rated positively as 'lower than expected'.

#### Recommendations

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

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# **Learning from deaths report – Quarter Q4 2021-22**

### 1. Purpose

- 1.1. This paper summarises the key learning identified in the mortality reviews completed for Quarter 4 of 2021/22.
- 1.2. This report provides a quarterly overview of Trust-level mortality data for the period of Quarter 4: January 2022 to March 2022, and performance for the latest available Dr Foster Intelligence data, providing 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 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 during Quarter 4 of 2021/22

Table 1: Number of mortality reviews completed during Quarter 4 of 2021/22:

Total deaths	Total reviews (L1, L2 or SJR)	Deaths not reviewed within 8 weeks		
684	672	12		

- 3.1 During Quarter 4 of 2021/22 there were 684 inpatient deaths reported at OUH. Compliance with mortality reviews as per the agreed policy is presented in Table 1. There were 672 (98%) cases reviewed within 8 weeks. Of these reviews, there were 320 (47%) comprehensive Level 2 reviews and 13 (2%) structured mortality reviews. The 12 remaining cases (2 in MRC and 10 in SUWON) have been escalated and discussion at local M&M meetings is planned and these outstanding reviews will be followed up at MRG.
- 3.2 The New Oxford Critical Care unit is now open. As bed numbers increase, it is anticipated that the case mix will change to a great extent to include a higher volume and proportion of level 2 patients<sup>1</sup>. The HSMR as well as other quality metrics will be under close review during the transition and beyond.
- 3.3 Trust wide, there were 13 structured reviews completed during Quarter 4 of 2021/22. The reasons for completing the structured review include individuals with a learning disability, concerns raised by staff of families and concerns

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<sup>&</sup>lt;sup>1</sup> Patients requiring increased levels of observations or interventions (beyond level 1) including basic support for two or more organ systems and those 'stepping down' from higher levels of care.

- raised during the Medical Examiner scrutiny. Learning and recommendations from the completed structured reviews are included in this report.
- 3.4 During Quarter 4 of 2021/22, 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 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 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 during telephone discussions reflect a generally high degree of satisfaction for the care provided in the Trust. Any concerns raised by MEs or the bereaved 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 PALS.
- 4.3. Medical Examiners and Medical Examiner Officers work 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.
- 4.4. 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. The ME shares their comments with the learning from deaths email which is monitored by the Clinical Outcomes Manager. Emails and feedback received are shared with the relevant Division accordingly.
- 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 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.

### 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 Clinical Commissioning Group (OCCG) and is chaired by the Director of Quality and Lead Nurse from the OCCG. The Designated Doctor for Child Death is a Consultant Paediatrician at OUH and is commissioned by the OCCG to undertake this role.
- 5.5. Child mortality is discussed monthly at the mortality review group meeting.
- 5.6. An annual report for child mortality is in progress, once complete this will be presented to MRG and will be included in a future Learning from Deaths report.

# 6. Learning and actions from mortality reviews during Quarter 4 of 2021/22

6.1. The key learning points to emerge from mortality reviews undertaken during Quarter 4 were:

- 6.2. Reminders have been disseminated via Divisional governance meetings and safety huddles to clinical teams regarding the importance of communication and updating of families when a patient's clinical status changes.
- 6.3. The vital role of passports for patients with Learning Disabilities has been highlighted at MRG as a source of guidance regarding support structures important to the individual. This provides a snapshot of the patient to underpin assessment of normal behaviours and coping mechanisms and Guidance re: appropriate interventions. The next quarterly governance newsletter (SHINE) produced and shared across the trust will include a message relating to this.
- 6.4. 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. The Clinical Outcomes Manager has met with Divisional teams and reviewed the progress with the result that Divisional Governance teams have been reminded of the importance of checking the weekly level 1 report (supplied by the Information Team) to identify deaths requiring further review and assurance has been provided at MRG.
- 6.5. ICU compliance with level 1 reviews on EPR had improved in quarter 4 but approximately 25 remain undone. Trust policy is for all deaths to receive an electronic level 1 mortality review. All deaths in ICU are currently reviewed at level 2 and the area hopes to increase the number of EPR level 1 reviews over the next quarter.
- 6.6. 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 has recently been completed in Acute General Medicine.
- 6.7. 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.
- 6.8. The need for increasing awareness of the difference between a learning disability and a learning difficulty was highlighted in SUWON. This is being highlighted via Divisional and Directorate governance meetings with dissemination across the Division.
- 6.9. NOTSSCaN learning points focused on managing parental expectations where outlook is poor and ensuring that Organ Donation is offered where

- relevant. The need to engage Community teams and DGH teams when a child is known to them and the need for high quality documentation have been shared. Earlier consideration of palliative care input from the Helen and Douglas House charity is important, as this service is not available within the trust. The pathway for referral to Helen and Douglas House for children of all ages has been updated and disseminated to clinical teams.
- 6.10The 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 (PCC, ED, Paediatrics).
- 6.11Earlier 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 is planning to meet ward staff in several areas to raise the importance and progress this.
- 6.12Patients with known respiratory disease should have early referrals and review by respiratory medicine. Use of the EPR Consultant pool has been highlighted.
- 6.13Notable 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 wishes to proceed with the revision in a planned manner; rather than to operate in an emergency when the periprosthetic fracture was likely to have exited the skin. The Assistant Coroner asked that her thanks be passed onto the teams who had to deal with a difficult and distressing sudden deterioration.

# 7. Patient safety incidents with an impact of death and subsequent SIRI investigations declared during Quarter 4

- 7.1 Three incidents with an impact of death were declared as a Trust Level Serious Incident Requiring Investigation (SIRI) during Quarter 4 2021/22.
- 7.2 These concerned:
  - 7.2.1 An investigation covering nosocomial COVID-19 infections.

- 7.2.2 A patient died by suicide.
- 7.2.3 A young adult patient that underwent revision of broken spinal rods and extension of implants for neuromuscular scoliosis unexpectedly died post-operatively.
- 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.

# 8. Further analysis of structured mortality reviews completed during the quarter:

### Background:

- 8.1. Structured mortality review blends traditional, clinical judgement-based review methods with a standard format. This approach requires reviewers to make safety and quality judgements over phases of care, to make explicit written comments about care for each phase, and to score care for each phase. The result is a relatively short but rich set of information about each case in a form that can also be aggregated to produce knowledge about clinical services and systems of care.
- 8.2. The objective of the review method is to look for strengths and weaknesses in the caring process, to provide information about what can be learnt about the hospital systems where care goes well, and to identify points where there may be gaps, problems, or difficulty in the care process.
- 8.3. Structured review is mandated in the following circumstances:
  - 8.3.1. All deaths where bereaved families and carers, or staff, have raised a significant concern about the quality-of-care provision.
  - 8.3.2. All in-patient, out-patient, and community patient deaths of those with learning disabilities.
  - 8.3.3. All deaths in a service specialty, particular diagnosis, or treatment group where an 'alarm' has been raised with the provider through whatever means (for example via a Summary Hospital-level Mortality Indicator or other elevated mortality alert, concerns raised by audit work, concerns raised by the CQC or another regulator).

- 8.3.4. All deaths in areas where people are not expected to die, for example in relevant elective procedures.
- 8.3.5. Deaths where learning will inform the provider's existing or planned improvement work, for example if work is planned on improving sepsis care, relevant deaths should be reviewed, as determined by the provider. To maximise learning, such deaths could be reviewed thematically.
- 8.3.6. A further sample of other deaths that do not fit the identified categories so that providers can take an overview of where learning and improvement is needed most overall.
- 8.3.7. Evidence shows that most care is of good or excellent quality and that there is much to be learned from the evaluation of high-quality care (table 2).

**Table 2: Analysis of Structured Reviews** 

	Surgical?	Admission phase	Ongoing care	Procedural care	Perioperative care	End of life care	Overall assessment
Patient 1	No	4	4	N/A	N/A	4	4
Patient 2	No	4	4	N/A	N/A	4	4
Patient 3	No	4	4	N/A	N/A	4	4
Patient 4	No	4	4	N/A	N/A	4	4
Patient 5	Yes	3	2	4	2	5	3
Patient 6	Yes	3	3	3	3	3	3
Patient 7	Yes	4	3	4	2	3	3
Patient 8	No	4	2	N/A	N/A	3	2
Patient 9	No	4	4	N/A	N/A	4	4
Patient 10	Yes	4	4	4	4	4	4
Patient 11	Yes	3	3	4	2	3	2
Patient 12	No	4	3	N/A	N/A	3	3
Patient 13	Yes	3	3	3	3	3	3
Total		48/65	43/65	22/30	14/30	47/65	43/65

Phase of care scores are recorded as - 1. Very poor care 2. Poor care 3. Adequate care 4. Good care 5. Excellent care

#### **Discussion:**

- 8.4. The thirteen patients were all discussed at the mortality review group meetings 20th January 17th February, and 17th March 2022.
- 8.5. Of the completed reviews, all learning disability cases, cases involving a serious incident investigation and any case where care quality concerns are identified were presented to the mortality review group.
- 8.6. In two cases the overall score was 2 highlighting poor care for the patients involved. Both cases were discussed at MRG and upgraded to SIRI investigation. The poor care identified was not felt to have affected the outcome in both reviews.
- 8.7. No death was deemed to be avoidable.

### Issues identified and learning:

- 8.8. In one case improved communication between the Emergency Department and on-call Medical teams was noted.
- 8.9. Two cases were escalated to SIRI investigations due to care quality issues identified in the reviews (patient 8 and patient 11 where the overall care score was 2). Any relevant Trust-wide learning will be included in future LFD reports (section 6).
- 8.10. One case was escalated to a Divisional investigation due to issues identified in nursing care. Any relevant Trust-wide learning will be included in future LFD reports.
- 8.11. One case was shared with South Central Ambulance Service (SCAS) for learning and improvement.
- 8.12. Use of Hospital Passports was commended.
- 8.13. In several cases, early discussions were held regarding DNACPR decision.
- 8.14. Training to complete reviews is provided internally monthly, the current number of trained reviewers by division can be seen in table 3.

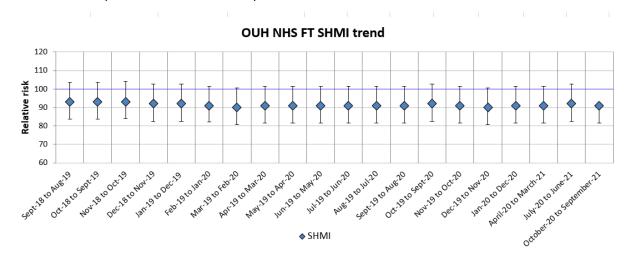
Consultant Other (clinical governance **Trained Lead Nurses Division Reviewers** team) **MRC** 51 12 4 67 CSS 1 26 16 9 **NOTSSCa** 2 35 22 11 SuWOn 59 33 19 7 10 8 Corporate 1 1 **Trust total** 197 122 50 22

**Table 3: Structure Review Training by profession** 

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

- 9.1. There have been no mortality outliers reported for OUH from the CQC or the Dr Foster Unit at Imperial College during Quarter 4.
- 9.2. The SHMI for the data period October 2020 to September 2021 is 0.91. This is rated 'as expected.' Chart 1 depicts the SHMI trend. The SHMI has remained rated 'as expected.

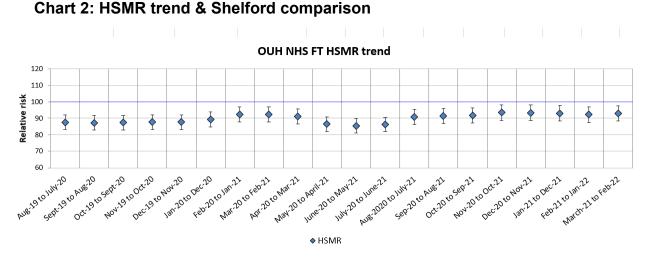
**Chart 1: SHMI trend & Shelford comparison** (Presented with a baseline of 100 to enable comparison to the HSMR)



Shelford Group Trust	SHMI (Jan-20 to Dec-20)	Banding
UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	0.70	Lower than expected
GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	0.73	Lower than expected
IMPERIAL COLLEGE HEALTHCARE NHS TRUST	0.75	Lower than expected
CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	0.88	Lower than expected
OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	0.91	As expected
MANCHESTER UNIVERSITY NHS FOUNDATION TRUST	0.94	As expected
UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	0.95	As expected
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	0.95	As expected
KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	0.97	As expected
SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	1.00	As expected

The SHMI calculation includes deaths within 30 days of discharge and palliative care. OUH SHMI is 'as expected' while some trusts have a 'lower than expected' SHMI. An analysis of the data indicates that this difference is due to the on-site hospice at OUH. When the OUH SHMI value is adjusted for palliative care it is rated as 'lower than expected.'

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

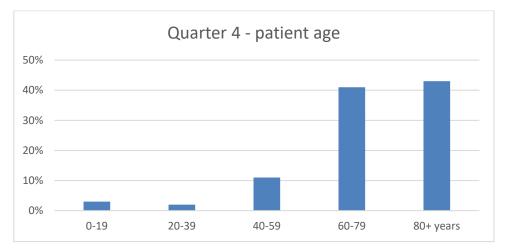


The Shelford Group *						
Title	CUSUM	Vol	Obs	Exp	%	Relative risk
SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	<b>4</b> 4 1	86390	1960	1911.2	2.3	102.5
UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	<u>\$\alpha\$</u> 20 <b>\$\alpha\$</b> 3	115350	3820	3726.2	3.3	102.5
THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	<b>4</b>	72575	1515	1575.7	2.1	96.2
OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	<b>4</b>	63578	2049	2203.5	3.2	93.0
KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	<b>4</b> 11	55290	1780	1928.4	3.2	92.3
MANCHESTER UNIVERSITY NHS FOUNDATION TRUST	<u>43</u>	93270	2435	2888.7	2.6	84.3
IMPERIAL COLLEGE HEALTHCARE NHS TRUST	<b>4</b> 8	62935	1335	1817.8	2.1	73.4
CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	<b>4</b> 37	57475	1090	1501.6	1.9	72.6
GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	<b>4</b> 31	51010	815	1122.9	1.6	72.6
UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	<b>4</b> 31	49960	605	880.9	1.2	68.7

### 10. Analysis of mortality during Quarter 4:

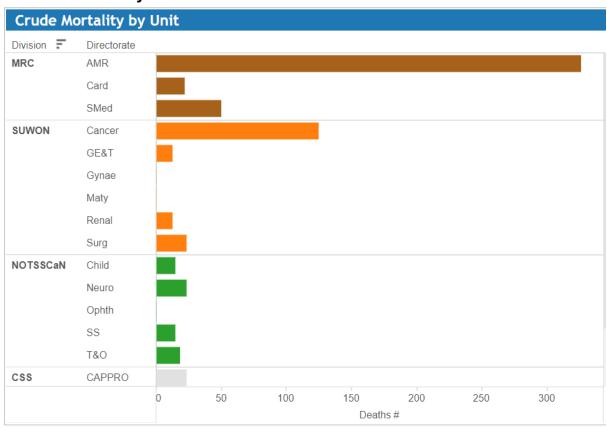
10.1. 37% of deaths occurred in patients aged 60 to 79 years and 48% in patients over 80 years of age (Chart 3). These statistics are in line with previous quarters.

Chart 3: Mortality - patient age



10.2. The highest number of deaths were admitted to the Acute Medicine and Rehabilitation (AMR) Directorate under the MRC Division (Chart 4). There were 388 deaths and 16,063 patient discharges from MRC during Quarter 4.

**Chart 4: Deaths by Directorate** 



- 10.3. Of the 340 deaths for the period of Quarter 4 occurring under the AMR directorate, 225 (67%) of deaths occurred under the speciality of acute general medicine.
- 10.4. Ethnicity data can be seen below in table 5.

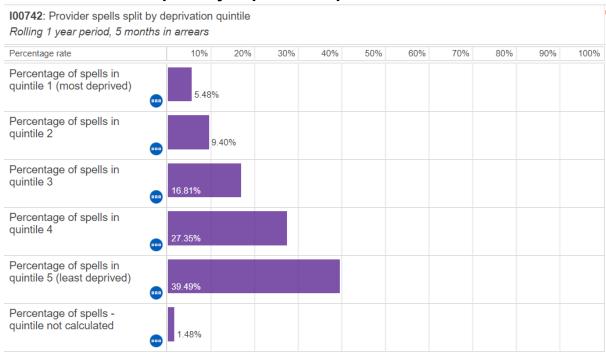
Table 5: Death by ethnic background:

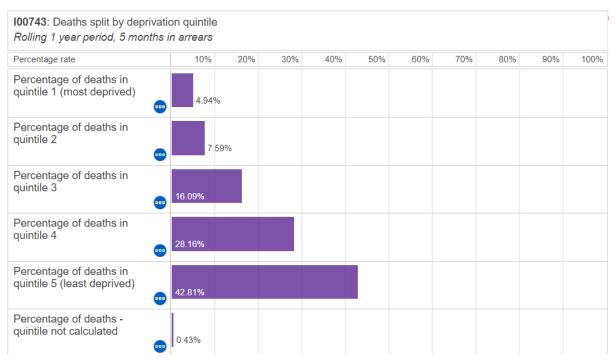
Ethnicity	Total
White British	279
Not Stated	40
Not Known	2
Any Other White Background	6
Any Other mixed background	2
White Irish	1
Any Other Asian Background	4
White and Black Caribbean	2
Pakistani	2
Indian	2
Caribbean	2

- 10.5. VLAD charts are statistical process control charts which provide a visual comparison between an expected outcome and its associated observed outcome. VLAD charts enable the depiction of trends in outcomes over time and the detection of variations within the reporting period for a particular diagnosis group. These charts facilitate the monitoring of mortality outcomes within the Trust compared to the national baseline and provides trigger alerting when a run of individual patient outcomes trends outside the expected range.
- 10.6 NHS Digital publishes VLAD charts for 10 SHMI diagnosis groups selected because they have high levels of patient activity and risk models that are considered to have sufficiently explained the expected variation in outcomes due to the case-mix adjustment.
- 10.7 A downward trend indicates a run of more deaths than expected. An upward trend indicates a run of fewer deaths than expected. The control limits (which are shown with a dotted line) enable alerts to be generated when a run of individual patient outcomes trends outside of expected levels. There were no investigations commenced relating to the published VLAD charts during Quarter 4 2021/22.

- 10.8 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.
- 10.9 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.
- 10.10 Chart 5 displays the percentage breakdown of spells and deaths by deprivation quintile. There is a marginally higher percentage of deaths in quintile 4 relative to the percentage of spells attributed to those quintiles.

### Chart 5a: % SHMI spells by deprivation quintile





# Chart 5b: % deaths by deprivation quintile

## 11. Crude Mortality

- 11.1. Crude mortality gives a contemporaneous, but not risk-adjusted, view of mortality across OUH.
- 11.2. There was a sharp increase in the mortality rate in April 2020 due to the increased number of deaths and decrease in activity related to the COVID-19 pandemic. There was a rise in the mortality rate in January 2021 resulting from the increase in the number of deaths related to the further wave of the COVID-19 pandemic. Chart 6 depicts the crude mortality rate by Finished Consultant Episodes (FCEs).

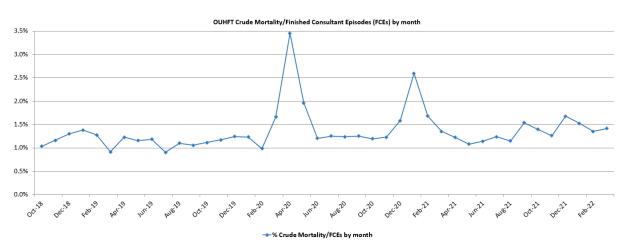
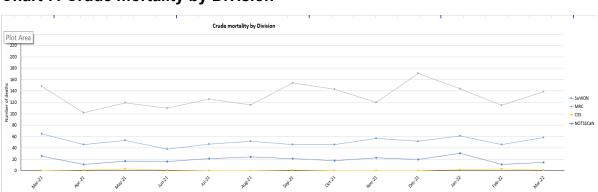


Chart 6: Crude mortality rate by Finished Consultant Episodes (FCEs)

11.3. During Quarter 4 of 2021/22:

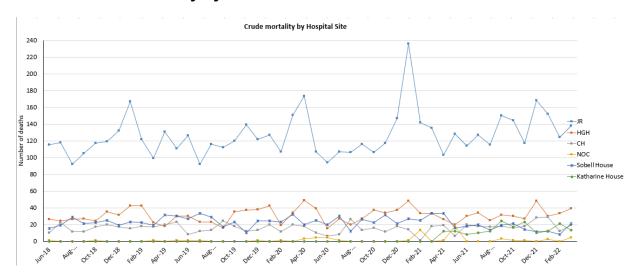
- 11.3.1. Neurosciences, Orthopaedics, Trauma, Specialist Surgery, Children's, and Neonatology Division reported that 73 patients died from a total of 14,659 discharges.
- 11.3.2. Medical Rehabilitation and Cardiac Division reported that 412 patients died from a total of 16,063 discharges.
- 11.3.3. Surgery, Women's, and Oncology Division reported that 175 patients died from a total of 17,597 discharges.
- 11.3.4. Clinical Support Services Division reported 24 deaths in the Critical Care Units from a total of 615 discharges.
- 11.4. Chart 7 presents the crude mortality by Division.



**Chart 7: Crude mortality by Division** 

11.1 Chart 8 depicts the crude mortality by hospital site. Most deaths occur at the John Radcliffe Hospital which has the highest activity.

**Chart 8: Crude mortality by Site** 



### 12. Corporate Risk Register and related Mortality risks

- 12.1. Relevant mortality risks from the Corporate Risk Register can be seen below:
- 12.2. Failure to care for patients correctly across providers at the right place at the right time.
- 12.3. Trust-wide loss of IT infrastructure and systems (e.g., from Cyberattack, loss of services etc).
- 12.4. Failing to respond to the results of diagnostic tests.
- 12.5. Patients harmed because of difficulty finding information across two different systems (Paper and digital).
- 12.6. Potential harm to patients, staff, and the public from nosocomial COVID-19 exposure.
- 12.7. Lack of capacity to meet the demand for patients waiting 52 weeks or longer.
- 12.8. Ability to achieve the 85% of patients treated within 62 days of cancer diagnose across all tumour sites.

### 13. Mortality Review Governance

- 13.1. 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.
- 13.2. 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.
- 13.3. CIC reports `to Clinical Governance Committee (CGC), Chaired by the Chief Medical Officer or the Chief Nursing Officer.
- 13.4. CGC reports via Trust Management Executive to the Integrated Assurance Committee (subcommittee of the Trust Board).

### 14. Recommendations

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

### 15. Appendix 1 - Key differences between the SHMI and HSMR

- 15.1. The Trust references two mortality indicators: the SHMI, which is produced by NHS Digital, and the HSMR produced by Dr Foster Intelligence.
- 15.2. 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.
- 15.3. 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 4: 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 nonspecialist 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.			