

## Cover Sheet

Public Trust Board Meeting: Wednesday 12 May 2021

TB2021.34

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**Title:** Learning from deaths report

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**Status:** For Information

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

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**Board Lead:** Chief Medical Officer

**Confidential:** No

**Key Purpose:** Assurance

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## Executive Summary

1. During quarter 3 of 2020/21 there were 661 inpatient deaths reported at OUH. There were 577 (87%) of cases reviewed within 8 weeks. Of these reviews, there were 253 (38%) comprehensive Level 2 reviews and 11 (2%) structured mortality reviews which include 9 structured reviews for patients with learning disabilities. There were no deaths judged more likely than not to have been due to problems in the care provided.
2. The NHSE COVID-19 Patient Notification System report 484 deaths involving COVID-19 at OUH. Of these cases, there were 35 probable or definite hospital-onset healthcare associated COVID-19 infection deaths.
3. All COVID-19 related deaths are being subjected to a mortality review. To date, there have been 398 COVID-19 related deaths which have had mortality reviews of any type. This includes 223 Level 1 screening reviews, 167 comprehensive Level 2 reviews, 8 structured mortality reviews including 6 structured reviews for patients with learning disabilities. There have been no COVID-19 related deaths judged more likely than not to have been due to problems in the care provided.
4. In accordance with national guidance, all probable or definite hospital onset healthcare associated COVID-19 infection deaths are reported and investigated as patient safety incidents
5. In line with the DHSC directive, the Lead Medical Examiner is reviewing the deaths of members of staff involving COVID-19.
6. The Summary Hospital-level Mortality Indicator (SHMI) for the data period December 2019 to November 2020 is 0.90 and remains rated 'as expected.' The Hospital Standardised Mortality Ratio (HSMR) is 89 for the data period January 2020 to December 2020 and remains rated 'lower than expected.'

## Recommendations

7. The Public Trust Board is asked to receive and discuss the learning identified from mortality reviews.

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## Learning from deaths report

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### 1. Purpose

- 1.1. This paper summarises the key learning identified in the mortality reviews completed for quarter 3 of 2020/21.
- 1.2. The approach to reviewing deaths involving COVID-19 is presented with analysis of the cases.

### 2. Background

- 2.1. 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. The Level 1 review is a peer review by a consultant not directly involved in the patient's care.
- 2.2. 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.
- 2.3. The clinical units are responsible for disseminating the learning and implementing the actions identified in mortality reviews. Each Division maintains a log of actions from mortality reviews and monitors progress by their clinical units. 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.

### 3. Mortality reviews quarter 3 of 2020/21

- 3.1. During quarter 3 of 2020/21 there were 661 inpatient deaths reported at OUH. The number of mortality reviews completed is presented in Table 1. There were 577 (87%) of cases reviewed within 8 weeks. Of these reviews, there were 253 (38%) comprehensive Level 2 reviews and 11 (2%) structured mortality reviews.

**Table 1: Number of mortality reviews quarter 3 of 2020/21**

Total deaths	Number of mortality reviews (of any type)	Level 1 reviews	Level 2 reviews	Structured reviews	Deaths not reviewed within 8 weeks
661	577 (87%)	313 (47%)	253 (38%)	11 (2%)	84 (13%)

- 3.2. SuWOn and NOTSSCaN Divisions have reported that the outstanding reviews have now been completed. The Acute Medicine and Rehabilitation Directorate have re-commenced Mortality and Morbidity meetings and all outstanding Level 2 reviews have now been completed. The Respiratory Medicine Unit will re-commence Mortality and Morbidity meetings in March and the focus will be on the cases awaiting Level 1 reviews.
- 3.3. There were 9 structured reviews for patients with learning disabilities and 2 structured reviews for cases identified at the Serious Incident Requiring Investigation (SIRI) Forum.
- 3.4. During quarter 3 of 2020/21, there were no patient deaths judged more likely than not to have been due to problems in the care provided.
- 3.5. The Coroner has issued a 'Regulation 28: Report to prevent future deaths' for a Trauma case. The areas of concern were that there is not a Major Trauma Lead Consultant or a Trauma Co-ordinator in post in accordance with the National Institute for Health and Care Excellence (NICE) guidelines. The mortality review concluded that there was poor care provided to the patient though this would not have changed the outcome.

The Trust response to the Coroner was that the Major Trauma Consultant role has been undertaken by the Orthopaedic Trauma consultants since the inception of the Major Trauma Centres (MTCs) in 2012. The role as defined by NHSE requires that a consultant undertake overall holistic care for all patients admitted to a MTC with traumatic injuries. Although many patients do have orthopaedic injuries (either wholly or as part of multiple injuries), there are other patients whose trauma is exclusively non-orthopaedic. This group is (for each specialty) a small number of patients. These patients have until now been managed by the surgical specialty related to their primary injury.

As the Trust moves to recover from the COVID-19 pandemic, the Trust will relocate trauma services to clinical areas that are physically adjacent. With this in place, patients would be admitted under the overall care of a 'Major Trauma Consultant' who will be an Orthopaedics Consultant. If their trauma is exclusively related to a different surgical specialty, referral would be made to that specialty for ongoing lead care. If the patient has orthopaedic/multiple (poly) trauma the patient would remain under the care of the MTC consultant. Isolated traumatic brain injuries will continue to be admitted under the care of Neurosurgery. The Trust would expect to retain some flexibility if a patient-specific factor required variation to this plan in order to ensure best care for the patient.

In respect to Trauma Co-ordinators, this role aims to allocate a named team member (keyworker) for each patient. Two roles are described by NHSE: Trauma Co-ordinator (TC) and Rehabilitation Co-ordinator (RC). Each MTC

in England has chosen to build their service differently. At OUH, currently there are 1.4 whole time equivalent (WTE), Band 7 (senior) RCs who act as key workers for Major Trauma patients. Complete staffing of this group would require 6 WTE staff as identified by the Major Trauma management group in collaboration with incumbent staff. The Trust has recently approved 2 additional WTE RC posts. This will increase the number of WTE co-ordinators to 4 to provide comprehensive 5 days service. This staff group may be able to provide limited weekend cover, but it is the Trust's expectation that 2 further posts will be added to deliver resilient 7 day working.

#### **4. Approach to COVID-19 deaths**

4.1. NHS England and NHS Improvement guidance defines a probable or definite hospital-onset healthcare associated COVID-19 infection death as:

- a) the death of a patient who has a positive specimen result where the swab was taken within 28 days of death and/or COVID-19 is cited on either Part 1 or Part 2 of the death certificate (i.e., the death resulted from a COVID-19 clinically compatible illness with no period of complete recovery between the illness and death)
- b) and the COVID-19 infection linked to the death meets the definition of 'probable' or 'definite' hospital-onset healthcare associated infection:
  - Hospital-Onset Probable Healthcare-Associated - a positive specimen date 8-14 days after hospital admission
  - Hospital-Onset Definite Healthcare-Associated – a positive specimen date 15 or more days after hospital admission

4.2. All probable or definite hospital-onset healthcare associated COVID-19 infection deaths are reported and investigated as patient safety incidents.

#### **5. Analysis of COVID-19 deaths**

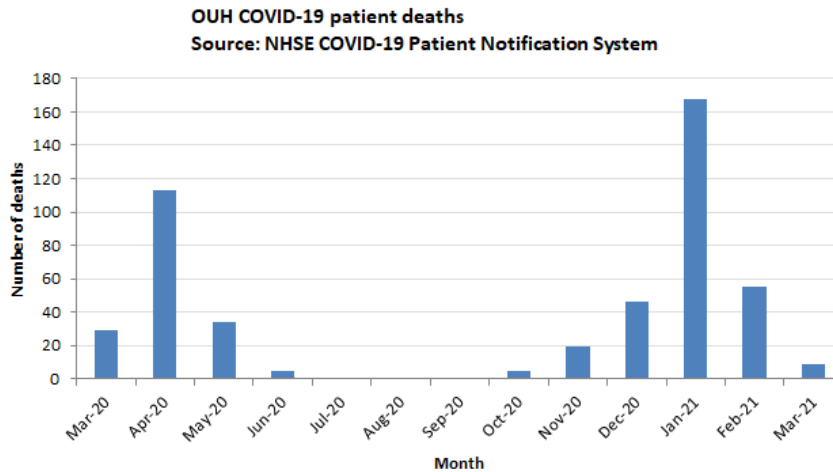
5.1. The NHSE COVID-19 Patient Notification System report 484 deaths involving COVID-19 at OUH from 1 March 2020 up to 31 March 2021. Of these cases, there were 35 probable or definite hospital-onset healthcare associated COVID-19 infection deaths.

5.2. All COVID-19 related deaths are being subjected to a mortality review. To date, there have been 398 COVID-19 related deaths which have had mortality reviews of any type. This includes 223 Level 1 screening reviews, 167 comprehensive Level 2 reviews, 8 structured mortality reviews including 6 structured reviews for patients with learning disabilities. There have been

no COVID-19 related deaths judged more likely than not to have been due to problems in the care provided.

5.3. The majority of COVID-19 deaths occurred in April 2020 and January 2021 (Chart 1).

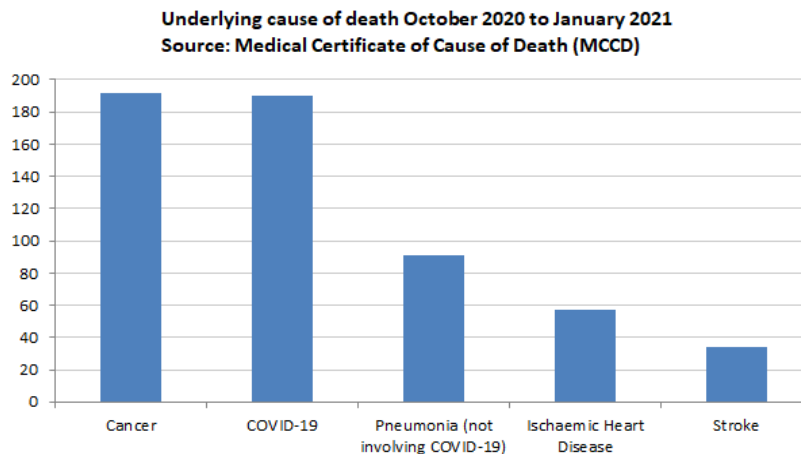
**Chart 1: OUH COVID-19 patient deaths by month of death**



5.4. The OUH COVID-19 crude mortality rate for April to December 2020 was 14.8% compared to the national crude mortality rate of 23.2% (Source: Dr Foster Intelligence).

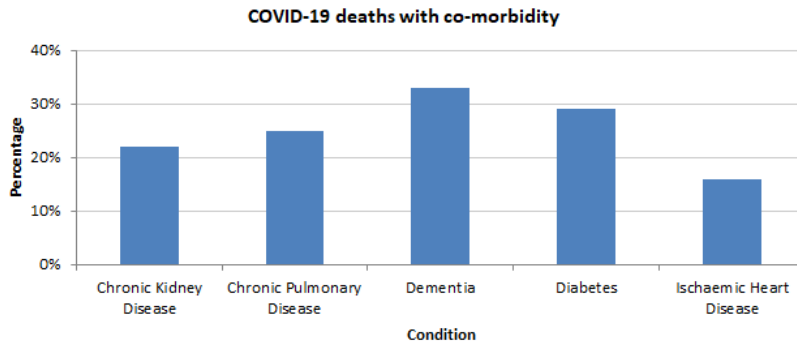
5.5. Between October 2020 and January 2021, the most frequently recorded underlying cause of death was cancer or COVID-19 (Chart 2).

**Chart 2: Underlying cause of death on Medical Certificate of Cause of Death (MCCD)**



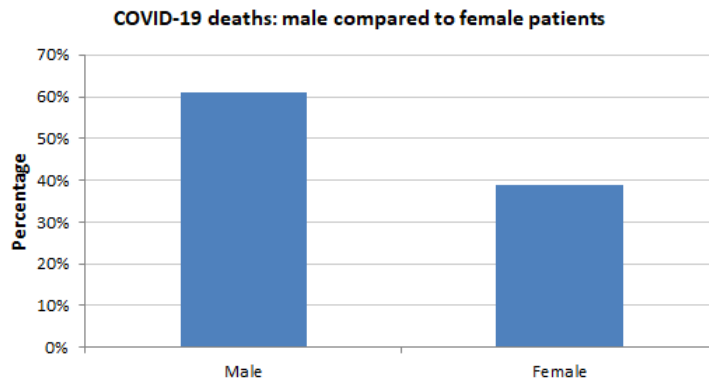
5.6. Of the deaths involving COVID-19; there was at least one co-morbidity in every reported case. Dementia and diabetes were the most common co-morbidity found in deaths involving COVID-19 (Chart 3).

**Chart 3: COVID-19 deaths with co-morbidity**



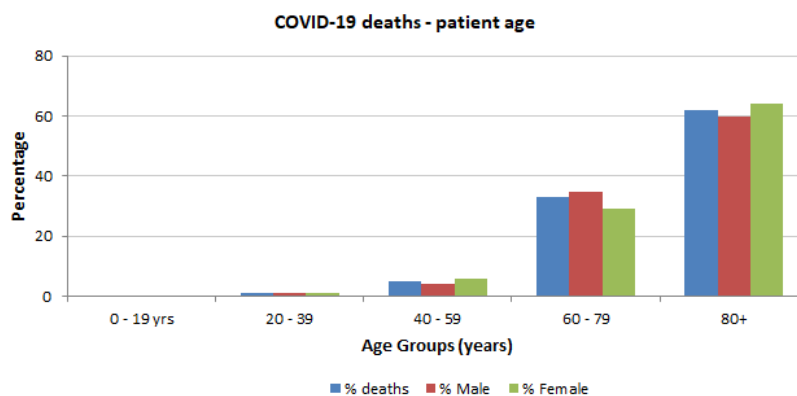
5.7. Male patients had a higher mortality due to COVID-19 when compared to female patients (Chart 4)

**Chart 4: COVID-19 deaths – male compared to female patients**



5.8. The majority of COVID-19 deaths were reported in patients over 80 years of age (Chart 5).

**Chart 5: COVID-19 deaths – patient age**



5.9. In line with national guidance, all patients who died with a probable or definite diagnosis of nosocomial COVID-19 (see 4b, above, for definitions), are being



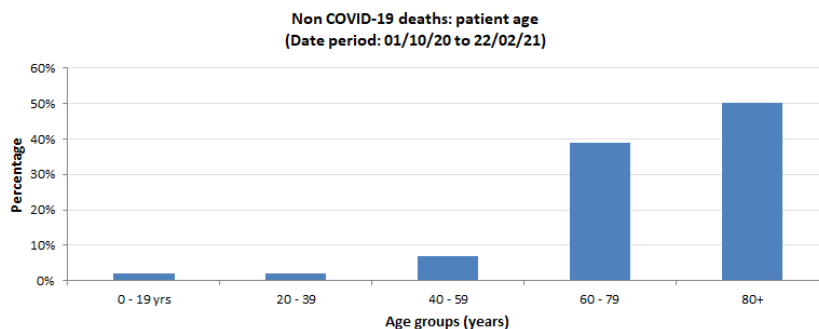
investigated at SIRI level. This is the case if COVID-19 is listed anywhere in cause 1 or 2 of the MCCD.

- 5.10. Originally each case was called as a separate SIRI, but following discussion with NHS England, and in agreement with commissioners, these were downgraded, and a single SIRI is being used to manage all cases. The local reference for this SIRI is 2021-071.
- 5.11. To date, 35 probable and nosocomial cases have been added to this over-arching SIRI, along with 2 further cases where nosocomial infection was indeterminate, but which had been flagged by the Medical Examiners.
- 5.12. The Trust plans to create brief individual summaries for each of these cases and to offer them to the patients' relatives. Once all individual investigations have been completed, a final report against 2021-071 will be created by Patient Safety to summarise all causative issues and learning.
- 5.13. In quarter 4 the Deputy Chief Medical Officer instigated regular meetings to manage this process, in the vein of the weekly Serious Incident Group meetings.

## 6. Analysis of non COVID-19 deaths

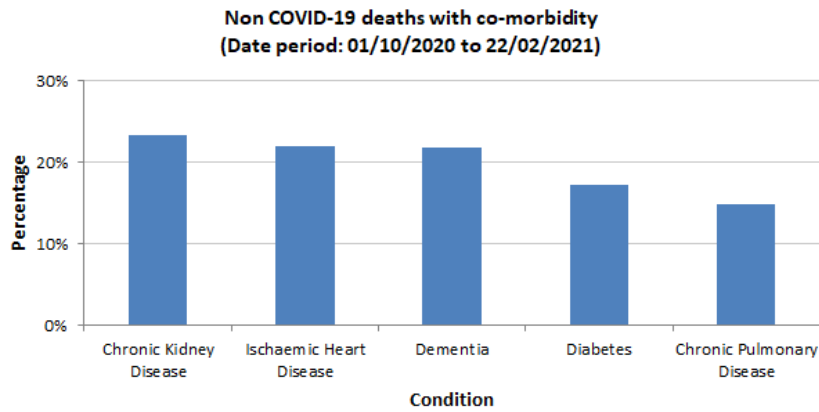
- 6.1. Of the non COVID-19 deaths reported; 50% of deaths occurred in patients over 80 years of age (Chart 6).

**Chart 6: Non COVID-19 deaths – patient age**



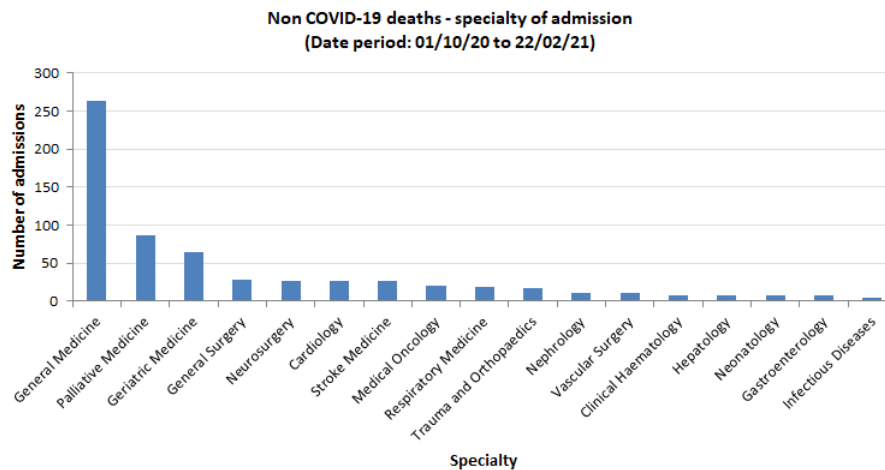
- 6.2. Of the non-COVID-19 deaths; there was at least one co-morbidity in all cases. Chronic kidney disease, dementia and ischaemic heart disease were the most common co-morbidity found among non COVID-19 deaths (Chart 7).

**Chart 7: Non COVID-19 deaths with co-morbidity**



6.3. Of the non COVID-19 deaths; the highest number of cases were admitted to General Medicine (Chart 8).

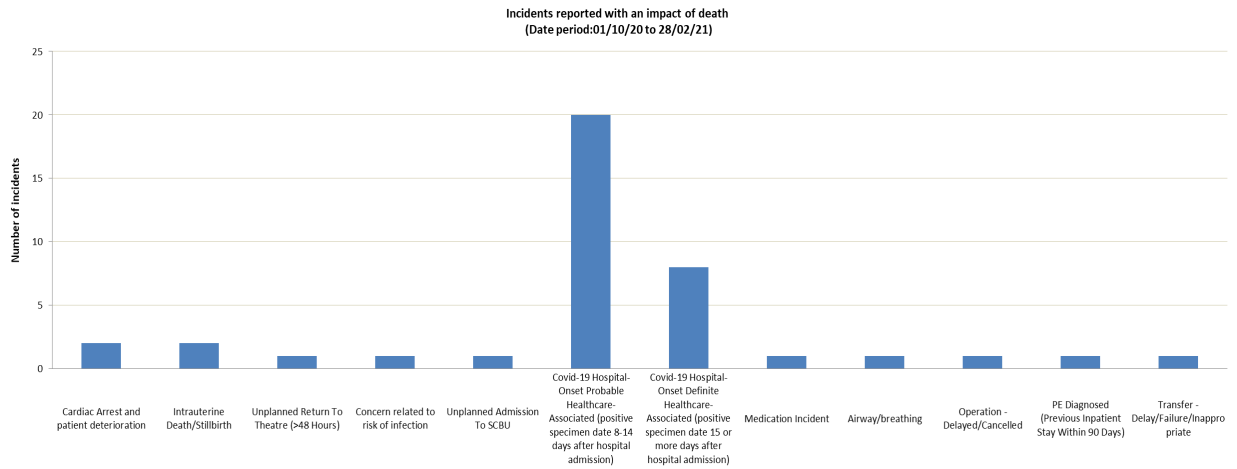
**Chart 8: Non COVID-19 deaths – specialty of admission**



## 7. Patient safety incidents with an impact of death

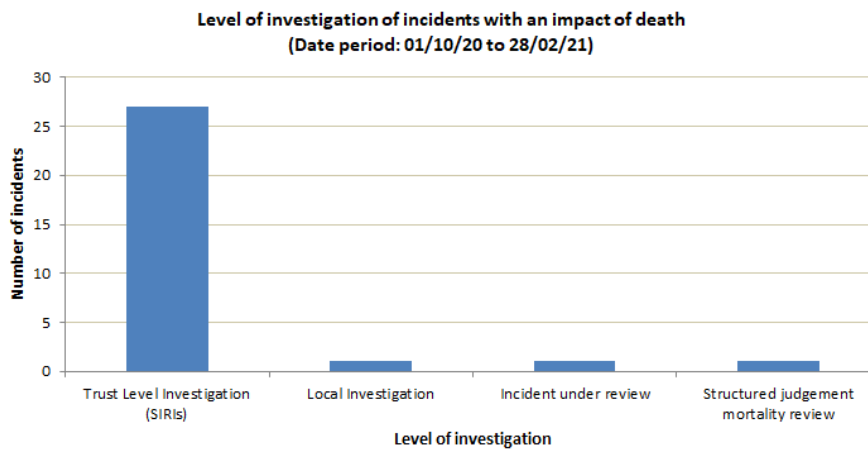
7.1. During the data period October 2020 to February 2021 the most common type of incident with an impact of death reported was hospital onset probable and definite COVID-19 infection (Chart 9).

**Chart 9: Main type of incident with an impact of death**



7.2. The majority of incidents with an impact of death are the subject of a Trust Level Serious Incident Requiring Investigation (SIRI) following national guidance for the probable/possible nosocomial COVID-19 patient deaths (Chart 10).

**Chart 10: Level of investigation for incidents with an impact of death**



7.3. During quarter 3 the trust confirmed 5 SIRIs relating to incidents graded as entailing an impact of death (excluding investigations subsequently downgraded from SIRI status). These concerned:

- 7.3.1. A term baby born via caesarean section following suboptimal cardiotocography who subsequently died.
- 7.3.2. A patient who unexpectedly deteriorated and died whilst awaiting surgical intervention for an arteriovenous malformation.
- 7.3.3. An intrapartum stillbirth of a baby with known trisomy 21.

- 7.3.4. A patient who died following significant blood loss from their dialysis line.
- 7.3.5. A patient who died having presented at Emergency Department in cardiac arrest eight weeks post partum.
- 7.4. A total of 9 'death graded' SIRIs have been reported in quarters 1-3 (excluding downgrades). This is line with financial year 2019-20, in which 12 'death graded' SIRIs were identified.

## **8. Learning and actions from mortality reviews quarter 3 of 2020/21**

### **Nosocomial COVID-19 cases**

- 8.1. COVID-19 Safety Audit completed at least once a month by all inpatient areas. This audit includes Personal Protective Equipment (PPE), patient screening and adherence with social distancing and staff testing. The audit results are reviewed by Ward Managers and the findings and areas for improvement are shared with staff. The audit results are included in the monthly Divisional Quality Reports submitted to the Clinical Governance Committee (CGC).
- 8.2. COVID-19 swabs for inpatients are done on the day of admission, day 3 and then weekly.
- 8.3. Ventilation risk assessments completed for all areas with risks added to the Divisional Risk Registers and ventilation programmes adhered to.
- 8.4. Safety Huddles held to inform ward staff in 'real time' of changes that may affect their clinical practice in relation to COVID-19.

### **Non COVID-19 cases**

- 8.5. A 'Red Flag' checklist for patients who are post neck surgery and at risk for airway complications is being developed and once ratified would be available at the bedside so that escalation can begin as early as possible. A collaborative project to design a 'neck surgery emergency equipment box' is to be undertaken by a multidisciplinary group across directorates where surgery with similar risks occurs and incorporating learning from the incident involving a patient who had thyroid surgery.
- 8.6. There has been a Trust wide safety message to increase awareness within the Trust of the requirement to contact the obstetric team within 1 hour of arrival for pregnant patients and patients in the puerperium.
- 8.7. The Interpreting and Translation Service are discussing with the Psychological Medicine team options for additional support for interpreters involved in difficult and potentially distressing conversations.

- 8.8. The Oncology Unit highlighted the need for a dedicated Teenage and Young Adult (TYA) Unit to manage the specific needs of complex young patients. This issue has been previously escalated by the Directorate and is on the Risk Register.
- 8.9. The Child Mortality Review team will be developing a guideline to assist operational managers and senior professionals with unexpected child deaths. There will be further training for the Emergency Department regarding the management of unexpected child death, with particular emphasis on multi-agency working and processes.
- 8.10. The Renal team will review patient transfers from the Renal Ward to community hospitals to identify whether there are areas which could be improved.
- 8.11. The Stroke Unit have implemented a weekly tracheostomy multi-disciplinary (MDT) meeting and ward simulation training to assist staff in the management of complex tracheostomies.
- 8.12. The Learning Disability team will be authoring a Trust-wide Safety Message highlighting the importance of uploading and referencing Hospital Passports on EPR for patients with learning disabilities.

## **9. Medical Examiner system**

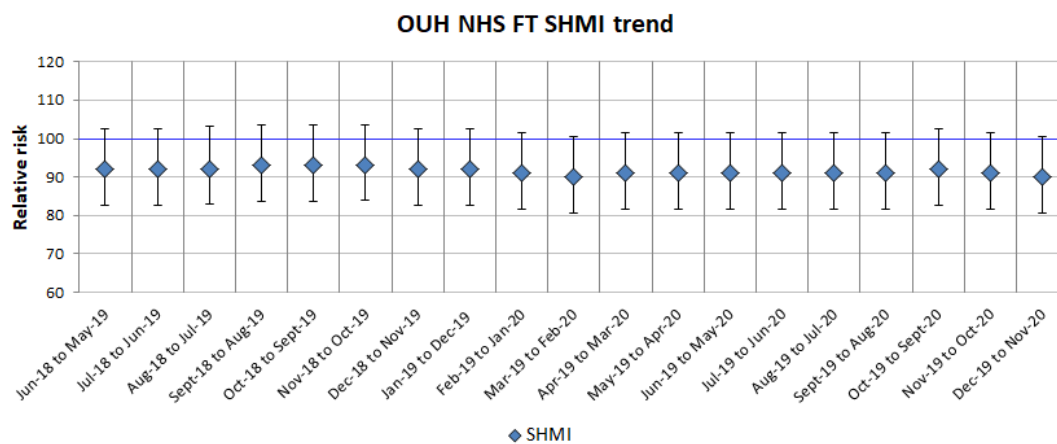
- 9.1. The Medical Examiners (MEs) have started regular monthly meetings to review progress and discuss cases. The MEs have highlighted likely/probable nosocomial COVID-19 cases for Root Cause Analysis. The feedback received by the MEs from bereaved families as to how they are informed of the deaths of their relatives has led to discussion and review of processes in wards.
- 9.2. 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.
- 9.3. The opportunity for families to discuss the care their relative received with an ME has been positively received. To quote one relative, the ME communication was an 'excellent adjunct' to the care provided.
- 9.4. In line with the Department of Health and Social Care directive; the Lead Medical Examiner is reviewing the deaths of members of staff involving COVID-19.

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

10.1. There have been no mortality outliers reported for OUH from the CQC or the Dr Foster Unit at Imperial College.

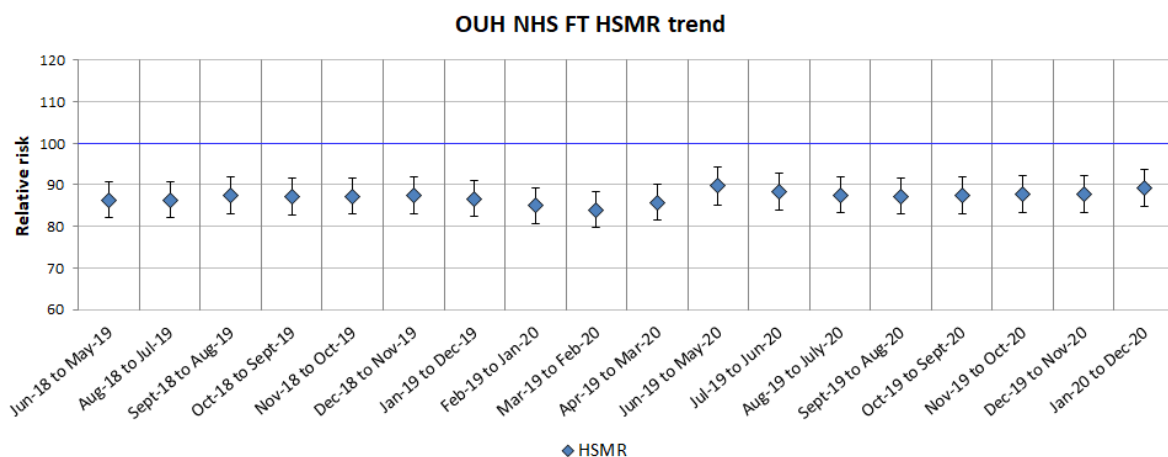
10.2. The SHMI for the data period December 2019 to November 2020 is 0.90. This is rated ‘as expected.’ Chart 11 depicts the SHMI trend. The SHMI has remained rated ‘as expected.’

**Chart 11: SHMI trend** (Presented with a baseline of 100 to enable comparison to the HSMR)



10.3. The HSMR is 89 for the data period January 2020 to December 2020. Chart 12 depicts the HSMR trend. The HSMR has remained rated ‘lower than expected.’

**Chart 12: HSMR trend**

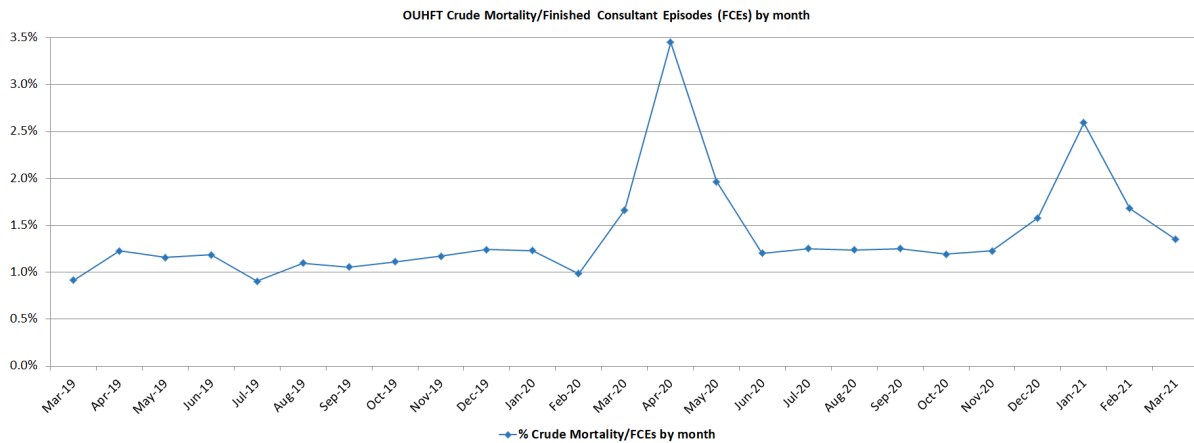


### 11. Crude Mortality

11.1. Crude mortality gives a contemporaneous but not risk-adjusted view of mortality across OUH. 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 is 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 13 depicts the crude mortality rate by Finished Consultant Episodes (FCEs).

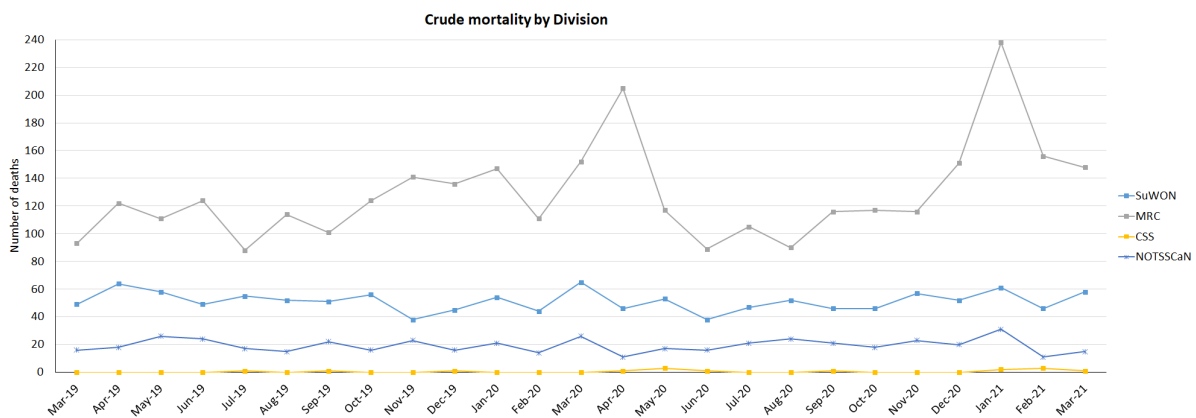
**Chart 13: Crude mortality rate by Finished Consultant Episodes (FCEs)**



11.2. During quarter 3 of 2020/21:

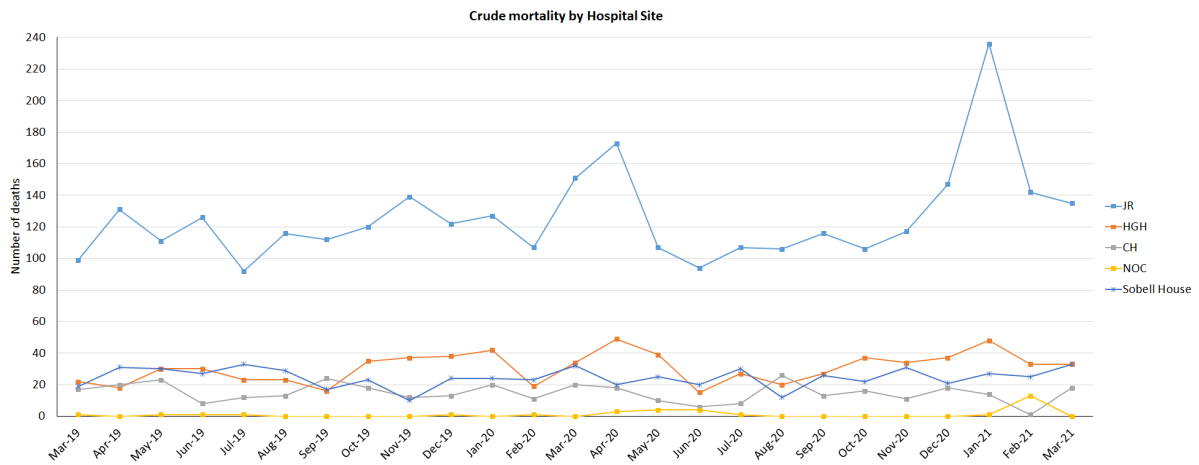
- 11.2.1. Neurosciences, Orthopaedics, Trauma, Specialist Surgery, Children’s and Neonatology Division reported that 60 patients died from a total of 14, 566 discharges.
- 11.2.2. Medical Rehabilitation and Cardiac Division reported that 415 patients died from a total of 14, 912 discharges.
- 11.2.3. Surgery, Women’s and Oncology Division reported that 157 patients died from a total of 16, 685 discharges.
- 11.2.4. Clinical Support Services Division reported 29 deaths in the Critical Care Units from a total of 360 discharges.
- 11.2.5. Chart 14 presents the crude mortality by Division.

**Chart 14: Crude mortality by Division**



11.3. Chart 15 depicts the crude mortality by hospital site. Most deaths occur at the John Radcliffe Hospital which has the highest activity.

**Chart 15: Crude mortality by Site**



**12. Recommendations**

12.1. The Public Trust Board is asked to receive and discuss the learning identified in mortality reviews.

Professor Meghana Pandit  
Chief Medical Officer

Dr Peyton Davis  
Director of Safety and Clinical Effectiveness  
Deputy Chief Medical Officer

22 April 2021