Trust Board Meeting in Public: Wednesday 13 May 2020
TB2020.43

<table>
<thead>
<tr>
<th>Title</th>
<th>Learning from Deaths</th>
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<tbody>
<tr>
<td>Status</td>
<td>For information</td>
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<tr>
<td>History</td>
<td>This is a quarterly report to the Board</td>
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<table>
<thead>
<tr>
<th>Board Lead</th>
<th>Professor Meghana Pandit, Chief Medical Officer</th>
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<tbody>
<tr>
<td>Key purpose</td>
<td>Strategy</td>
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Executive Summary

1. This paper presents the findings from reviews completed for inpatient deaths during quarter three of 2019/20.

2. In quarter three of 2019/20, there were 9 structured mortality reviews which includes 1 review for a patient with learning disabilities. There was 1 case reviewed from quarter two of 2019/20 which was judged more likely than not to have been due to problems in the care provided.

3. The implementation of the Medical Examiner system has been suspended during the COVID-19 pandemic.

4. Key learning points and actions identified in mortality reviews completed during quarter three of 2019/20 are presented for the Board.

5. There were 95 inpatient deaths reported at OUH involving COVID-19 from 1 March 2020 to 15 April 2020.

6. **Recommendation**
   The Board is asked to receive and discuss the learning points identified in mortality reviews.
Learning from deaths

1. Purpose
   1.1. This paper summarises the key learning points and actions identified in the mortality reviews completed for quarter three of 2019/20.

2. Mortality reviews
   2.1. The Trust Standardised Mortality Review policy requires that all inpatient deaths need to be reviewed within 8 weeks of the death occurring. All deaths have a Level 1 review. Since November 2019, clinical teams have been informed that Level 1 reviews must be a peer review by a consultant not directly involved in the patient’s care. Clinical areas where there are a high number of cases have a period of transition to implement this system within their Clinical Directorates.

   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. During quarter three of 2019/20 there were 724 inpatient deaths reported at OUH. The number of mortality reviews completed is presented in Table 1.

Table 1: Number of mortality reviews for quarter three of 2019/20

<table>
<thead>
<tr>
<th>Total deaths</th>
<th>Level 1 reviews</th>
<th>Level 2 reviews</th>
<th>Structured reviews</th>
<th>Deaths not reviewed within 8 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>724</td>
<td>297 (41%)</td>
<td>306 (42%)</td>
<td>9 (1%)</td>
<td>112 (16%)</td>
</tr>
</tbody>
</table>

2.3. The deaths which were not reviewed within 8 weeks are to have a Level 1 screening review. The Divisions advised the Mortality Review Group last week that none of these reviews had been completed at the time of the meeting (at any level). MRC are going to be following up the pending reviews with Horton Medicine (after intervention from the Divisional Medical Director), NOTSSCaN are to work with the new Trauma Clinical Governance Lead and follow up the pending reviews with Neurosciences and SuWOn are to start the usual process for mortality reviews again as the COVID-19 activity subsides.

2.4. The triggers for the structured reviews are listed in Table 2:

Table 2: Criteria for structured mortality reviews for quarter three of 2019/20

<table>
<thead>
<tr>
<th>Criteria for structured review</th>
<th>Number of reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Concern from staff</td>
<td>6</td>
</tr>
<tr>
<td>Concern from staff and concern from family</td>
<td>1</td>
</tr>
<tr>
<td>Severe mental illness</td>
<td>1</td>
</tr>
</tbody>
</table>
2.5. 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) and quarterly mortality reports to the Mortality Review Group (MRG).

2.6. There was one patient death reviewed from quarter two of 2019/20 which was judged more likely than not to have been due to problems in the care provided. The case related to a Cardiac Surgery patient who had an aortic valve replacement and coronary artery bypass graft. The learning points identified in the mortality review were as follows:

2.6.1. Patients should be seen and assessed preoperatively by the consultant in charge of surgery. There should be documentation of the operative plan.

2.6.2. Intracardiac air during open heart surgery is monitored using Transoesophageal Echocardiogram (TOE). It is vital that there is good communication between the TOE operator and the surgeon to ensure that de-airing is adequately performed. De-airing measures should be continued until all air has been cleared.

2.6.3. Intracardiac air embolism causes myocardial ischaemia. It may be necessary to allow a period of supportive bypass to clear air from the coronary circulation. Where cardiac function is adversely affected by ischaemia, the use of an intra-aortic balloon pump should be considered to support cardiac function.

This case has been discussed at the Cardiac Surgery mortality meeting and at the Trust level Mortality Review Group. The case is also the subject of an external review.

3. Medical Examiner system

3.1. In line with Government guidance the implementation of the medical examiner system was suspended during the COVID-19 pandemic to allow the appointed medical examiners to revert to their usual duties as medical practitioners, thereby adding to the medical practitioner resource to complete the Medical Certificates of Cause of Death (MCCDs).

4. Learning and actions from mortality reviews

Review of practice and pathways

4.1. The Orthopaedics Unit are discussing with the Radiology Clinical Governance Lead implementing a process for all abdominal and chest radiographs for emergency orthopaedic patients to be immediately reported by a radiologist.

4.2. The importance of following the Trust peri-operative antimicrobial guidelines and recording antibiotics administered at the time of surgery in the anaesthetic chart and on the Electronic Patient Record (EPR) was highlighted in the review of a Surgery case. The findings from the review are to be shared within the Surgical, Anaesthetic and Critical Care Units to disseminate learning.
4.3. The Infectious Diseases and Haematology Units reminded the clinical teams that only professional interpreters should be being used for clinical discussions with patients and that family members should not be used.

4.4. The Emergency Department team discussed cases where the clinical assessment is compromised by impaired patient mentation and communication and it was highlighted that in these cases the threshold for investigation should be low.

End of Life Care
4.5. The Acute General Medicine Unit highlighted to the clinical team the importance of having discussions about Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) with the patient and their family during the outpatient attendances or early in the admission.

Medication prescribing and administration
4.6. The Vascular Surgery nursing team will be presenting at their team meeting the findings from a review where the discharging nursing team had not informed the district nursing team that the patient required dalteparin anticoagulation and a dose was subsequently missed. The patient was re-admitted with acute left lower limb ischaemia and underwent a left iliac thrombectomy.

4.7. The Palliative Medicine Unit identified as an area of Trust wide learning that physical agitation at the end of life should be treated with midazolam and delirium with haloperidol unless there is evidence of pain, when opioids can be used. The Unit are authoring a Weekly Safety Message about using opioids appropriately at the end of life.

4.8. The Palliative Medicine Unit informed the team that anticipatory oral and or subcutaneous medications should be prescribed when indicated for all patients seen by the Palliative Medicine team (including the hospital and community teams) so that care is streamlined for patients transferring from one part of the service to another.

4.9. The Geratology team discussed the importance of appropriate analgesia for patients with fractures and the careful titration of analgesia, especially in patients with advanced age, frailty or chronic kidney disease. The case findings were fed back to the medical team who initiated the analgesia. The learning points are to be included in the Trust training for the use of opioids.

Documentation
4.10. The Trauma team highlighted as good practice the clear documentation that both the patient and his wife were aware of the risks of the surgery and that consent was sought in accordance with the principles of the Montgomery ruling.

5. Sharing learning from Serious Incidents Requiring Investigation (SIRI)
5.1. All SIRI related deaths are presented to MRG by the Lead Investigator. The key learning points and actions from reports presented to MRG during January and February 2020 were as follows:
5.1.1. The investigation of the case of a Radiology patient highlighted concerns about the patient’s medical condition prior to transfer to the Churchill Hospital. The transferring hospital has been informed of the concerns identified and provided with a copy of the SIRI report.

5.1.2. Following the investigation of a misplaced nasogastric tube (NGT); an ‘At a Glance’ of the ‘Insertion, use and care of fine bore nasogastric feeding tubes in infants and children’ policy and procedure was produced and a copy made available at each bed/cot side. The investigation found that the patient’s death was not related to the misplaced NGT.

5.1.3. The investigation of a patient’s fall in the Neurosciences ward found that closer observation of the patient and locating the patient closer to the nurse’s station may have helped prevent the patient wandering around the ward area, where the injury is most likely to have occurred, but that this is not possible to state definitively as the event is unclear. Following the incident, the Trust’s Enhanced Observation Guidance has been fully implemented within the Neurosciences Unit. The Clinical Practice Educators are working with the team to improve the documentation of nursing assessments and the care provided.

6. Deaths involving COVID-19

6.1. There were 95 inpatient deaths reported at OUH involving COVID-19\(^1\) from 1 March 2020 to 15 April 2020.

Chart 1: Number of deaths involving COVID-19\(^2\)

6.2. In 94% of deaths involving COVID-19; COVID-19 was the underlying cause of death\(^3\).

6.3. COVID-19 was the most frequent cause of death recorded for deaths between 1 March 2020 and 15 April 2020 (25% of all recorded deaths).

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\(^1\) The term ‘involving COVID-19’ refers to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

\(^2\) Medical Certificate of Cause of Death (MCCD) data as of 16/04/20.

\(^3\) The term ‘due to COVID-19’ refers to deaths with an underlying cause of death as COVID-19.
6.4. Pre-existing conditions in deaths involving COVID-19

6.4.1. Of the deaths involving COVID-19; there was at least one pre-existing condition in 95% of cases.

6.4.2. Diabetes was the most common pre-existing condition found among deaths involving COVID-19 (29% of all deaths involving COVID-19).

6.5. Male patients had a higher mortality due to COVID-19 when compared to female patients.

6.6. For the date period up to 15 April 2020; the COVID-19 recovery rate was 31% and the COVID-19 mortality rate was 25%. 
Table 3: COVID-19 recovery rate and mortality rate

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of COVID-19 infections (15/03/20 to 15/04/20)</td>
<td>376</td>
</tr>
<tr>
<td>Number of COVID-19 discharges to the usual place of residence (up to 15/04/20)</td>
<td>116</td>
</tr>
<tr>
<td>Recovery rate</td>
<td>31%</td>
</tr>
<tr>
<td>Number of deaths involving COVID-19 (15/03/20 to 15/04/20)</td>
<td>95</td>
</tr>
<tr>
<td>Mortality rate</td>
<td>25%</td>
</tr>
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6.7. The Mortality Review Group will receive further detailed COVID-19 outcome data and analysis at their May 2020 meeting.

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

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

7.2. The SHMI for the data period December 2018 to November 2019 is 0.92. The SHMI remains rated ‘as expected’.

Chart 4: SHMI trend analysis*

*Represented with a baseline of 100 to enable comparison to the HSMR

7.3. The HSMR is 87 for January 2019 to December 2019. The HSMR remains rated as ‘lower than expected’ (95% CL 82.9 – 90.7).
8. **Crude Mortality**

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

8.2. During quarter three of 2019/20:

8.2.1. Neurosciences, Orthopaedics, Trauma, Specialist Surgery, Children’s and Neonatology Division reported that 60 patients died from a total of 14,711 discharges.

8.2.2. Medical Rehabilitation and Cardiac Division reported that 488 patients died from a total of 16,274 discharges.

8.2.3. Surgery, Women’s and Oncology Division reported that 139 patients died from a total of 20,723 discharges.

8.2.4. Clinical Support Services Division reported 37 deaths from a total of 575 patients.

Chart 6: Crude Mortality
9. Conclusion
In accordance with national mortality guidance, the Trust has implemented a revised mortality review policy and structured mortality reviews since quarter three of 2017/18. This paper summarises the learning and actions identified in the mortality reviews completed during quarter three of 2019/20.
10. **Recommendation**

The Board is asked to receive and discuss the learning points identified in mortality reviews.

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Deputy Chief Medical Officer

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28th April 2020